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ORIGINAL COMMUNICATIONS.

CLINICAL NOTES RELATIVE TO PHYSICAL DIAGNOSIS.

Read before the Philadelphia County Medical Society, February 23, 1881,

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THE subject-matter of the remarks I will offer to the members of the Society this evening is the outcome of some observations in the domain of physical diagnosis. I am inclined to think that in questions of diagnosis we are often as much puzzled from having forgotten or overlooked received explanations of the phenomena of disease as, on the other hand, from our failure very often to proceed on a logical method of clinical study. In the first part of my paper my remarks may illustrate the primary proposition.

In clinical study by means of physical diagnosis there is a tendency to exalt the importance of investigation by auscultation and percussion, because of their real primal importance, to the neglect of other methods. I propose, in what I shall say, to develop, in the first place, the method of inspection in the clinical study of pleural effusions, because I have remarked that while many cases present the acknowledged evidences of this condition, viz., flatness on percussion, absent or distantly blowing breathing, absent or intense but distant divocal resonance, abolished vocal fremitus, etc., yet with reference to one method of examination, viz., inspection of the chest, there are many exceptions to the received evidences as laid down in the works on this subject.

There are a number of cases of moderate pleural effusion demanding special treatment, possibly operative, which may remain unrecognized because inspection is not practised. But sometimes it is urged that no information rewards the observer, and the method may adduce misleading evidence. The proposition, however, is that the intelligent application of inspection as a method of diagnosis is capable of evolving important results.

Three physical signs are usually recognized by inspection in cases of pleural effusion,—viz., there will be an enlargement of the affected side, with rotund bulging of the chest and intercostal tissues, and abolished respiratory movements, so far as expansion and contraction are concerned, over the area of the effusion.

It is also well understood that above the level of fluid in cases of limited effusions the respiratory movements may be almost normal. There are, however, certain exceptional facts, of supreme importance, to which I would solicit attention. These facts are, first, that in cases of effusion, even when this almost fills the chest, an up-and-down movement of the ribs of the involved side will often occur. In addition to this, an actual in-and-out movement of the tissues of the interspaces will occur on the involved side synchronous with respiration; usually with inspiration a depression of the intercostal tissues occurs.* Dr. Alexander James has also called attention to some facts which I myself have often noticed,—viz., there is frequently no obliteration of the intercostal spaces, nor is there increase by measure of the affected side, but, further than this, the side of the chest supplementally active on respiration is most prominent.

To elucidate these facts, I would invoke your attention to the following thoughts. The above-named physical signs are most demonstrable, not in the acute or largest effusions, but rather in those of a subacute or more chronic type, in the lesser effusions and those undergoing absorption. What is the nature or composition of these effusions? In the *Medical Times and Gazette*, January 3, 1880, you can consult a paper by Dr. James, continued in two numbers, devoted to an analysis of the composition of Transudations and Exudations. He has shown that the density of pleural effusions is greatest as contrasted with abdominal, cerebral, or subcutaneous effusions, because the respiratory movements exert an enormous aspiratory force, predisposing to transudation into the pleural cavities as a relief to the overfilled capillaries when the circulation is in the least obstructed,—as, for instance, the hydrothorax which occurs in heart-disease or Bright's diseases, as well as in sero-inflammatory collections. Pulmonary aspiration, he continues, explains the greater density of peritoneal as contrasted with cellular effusions. But this is not the only cause of the density of pleural effusions. Hoppe-Seyler has shown that, in cases of

* Edinburgh Medical Journal, October, 1880.

ascites due to cirrhotic liver, the more the fluid increases in amount, the more concentrated does it become. This is owing to the fact that absorption is continually going on by means of the lymphatics and peripheral branches of the systemic veins; and as water is the constituent of the transudation which is absorbed in most abundance, the transudation is constantly becoming more concentrated. To illustrate the influence of the respiration on absorption, Dybkowsky has shown that if solutions of colored liquids are injected into the pleural cavity of living dogs, absorption rapidly takes place, but that this does not occur if the animals are killed immediately after the injection. He also found that the rapidity of absorption was increased *pari passu* with the activity of the respiratory movements. Now, in large effusions, when the pleural cavity is almost filled, the aspiratory power of the lungs is lessened; but we must note that the physical signs I alluded to are most marked in cases of encysted effusions, or in those of moderate quantity, of subacute or chronic type, and those undergoing absorption. In these cases, as the lungs do partially expand, the aspiratory influence must be regnant. But, before applying this fact, let me cite some remarks of Dr. Douglass Powell* in a paper entitled "Some Effects of Lung Elasticity in Health and Disease." He has therein demonstrated that enlargement of the chest in pulmonary emphysema is due to the fact that the excentric thoracic resilience is less and less opposed by the elasticity of the lungs as the emphysema increases. He refers to a fact demonstrated by Stokes, that in emphysema the interspaces deepen on inspiration, as, in fact, do all the soft parts. The interspaces are found on a level only in extreme cases, when the pulmonary elasticity is totally destroyed; it is in these cases alone that the tissues bulge on forced expiration. We realize the verity of this excentric thoracic resilience when we consider that it is this power, aided by intercostal muscular action, which maintains the expansion of the chest in quiet respiration, although the action of the diaphragm tends to draw the chest-walls inward. Now, applying these facts to the exceptional physical signs I described in the outset, I incline to think the reason why there is often no obliteration of the intercostal spaces is because the increased density of the fluid in the chest tends to decrease the bulk of the effusion; and the area it occupies is diminished the longer a moderate effusion persists, just as a jelly, when it forms, occupies a slightly smaller area than the fluid from which it was formed. But, more than this, I mentioned an in-and-out movement of the intercostal tissues, occurring during the presence of an effusion in the pleura, noticed over the location of effusion. During the time an effusion persists, the chest-walls are already bulged beyond a physiological position, and from this point, owing to inherent resilience, they tend outward at each inspiration; but the lung-elasticity is abrogated to a varying degree by the compression of the pulmonary tissues by the effusion. Thus it comes to pass that the state of the chest-walls resembles their condition in moderate emphysema; consequently, the pulmonary intercostal tissues are depressed on inspiration, and tend to puff out or return to their morbid physiological state during expiration, just as these tissues act in emphysema of the lungs. I incline to think this explanation adequate, when the state of the effusion and the variety of case in which this phenomenon exhibits itself are considered; for it must be remembered that this movement occurs when there is not enough movement of the thoracic walls to invite the action of the intercostal tissues.

There are two other explanations of the movement of the intercostal tissues during respiration worthy of notice,—viz., in the first place, the union of the pulmonary and costal pleura by adhesions; but the retraction of the tissues in this case would occur during expiration, not inspiration. More than this, I have proved by post-mortem to my classes that adhesions were not present in cases in which, during life, we had noticed pronounced movement. The tissues may retract in inspiration, in cases of pressure on some portion of the bronchial tree; but this pressure is, of course, readily determined. The greater enlargement of the non-affected side is to be explained, as I believe, by the fact that the vicariously-dilated lung-tissue has not sufficient elasticity to oppose the excentric resiliency of the chest-walls. On the affected side, the accumulation of fluid gives a more rotund appearance to the chest-walls; but, by measurement, the circumference is frequently less than the healthy side, although

* Medico-Chirurgical Transactions, vol. lix.

effusion is present; and this retraction is aided by the tendency of the chest-walls to retract, if unsupported from *within.*

Before closing this part of the subject, let me express the concurrence of my clinical experience with that of Dr. James in the statement that there is a very close association between empyema and increased circumference of the chest, and bulging of the intercostal spaces of the affected side; and, with him, I have observed in these cases that there is sometimes a unilateral œdema of the corresponding side of the trunk. He remarks, "In empyema, these signs are due to the more acute pleural inflammation, producing at the same time a greater amount of paralysis, or, possibly, inflammatory alterations, in the underlying intercostal tissues; and thus occurs greater intra-pleural tension through diminished absorption, resulting from an interference with the respiratory movements. The lymph-circulation in the intercostal spaces is dependent on the proper movements of the intercostal muscles, just as the circulation in the diaphragm is dependent on its movements. In this way, the lymphatic circulation is doubly disabled."

Yet, while concurring in the main, I think that the above condition of the interspaces may also indicate an effusion attended by serious structural alterations in the pleura, without the formation of pus, or a hemorrhagic effusion. I have twice found this sign present in cases of hemorrhagic effusion, as proved by paracentesis, so that we may not expect a simple serous effusion if the œdema, etc., is present.

As a sign of some value in empyema guiding us to the selection of a suitable spot for the operation of paracentesis, in cases of encysted effusion, I would mention a study of the vocal resonance. In these cases the vocal resonance is apt to be quite distinct all over the chest-surface, possibly because of the presence of the adhesions and thickened pleural tissues favoring conduction. I usually select a spot where the vocal resonance is more muffled. Testimony relative to the vocal resonance in these cases is somewhat various. The writer in the *Edinburgh Journal* attributes the increased vocal resonance above the line of a pleural effusion, not to condensation of the lung above the fluid, but because the waves of sound transmitted through the bronchial tubes to the effusion are reflected upward, and the ear appreciates the resonance physiologically diffused over the entire thoracic cavity. This increased resonance, he says, can be heard at any part of the chest above the effusion, in which he differs from Skoda, who locates it at the lower angle of the scapulæ, near the large bronchi, near the vertebræ, and above or below this line. Walsh agrees, but says it can be heard anteriorly above the effusion. Guttmann declares the clear bronchial vocal resonance is only heard where the dense lung-tissue touches the chest, usually between the vertebral column and the scapulæ. I am sure we hear it both anteriorly and posteriorly, as Walsh expresses it; but I would invoke especial notice to the fact that it is also often so distinctly heard over the effusion that the element of distance, or the muffled quality of the sound, is the only element to enable us to make correct inferences.

Pursuing my theme,—viz., clinical investigation,—I would next allude to what I would style the logical approach to the study of the fundamental evidence in the diagnosis of aortic aneurism. I feel that my experience of seven years' unremitting study in the Philadelphia Hospital, during which time I have noted sixty-nine cases of aortic aneurism and seen many cases not noted, entitles me to express an opinion as to the method of clinical study which has been most helpful to me. The various writers on physical diagnosis have always laid great emphasis on the various murmurs which are familiar to us under the synonyme "bruits." When these typical murmurs are present, of course the evidence is most materially strengthened, and, indeed, is often rendered conclusive. But many cases of aneurismal enlargement should, if possible, be diagnosticated in their incipiency, before the enlargement of the aorta, whether by sacculation or dilatation, presents the physical conditions for the development of murmur or a typical bruit. I exhibit to the Society some typical specimens to illustrate my proposition that bruit may be much modified, or absent, although decided arterial lesions may be present. The aneurismal sacs in two of the cases are completely filled, in one case by laminated clot, in the other case by a ball-shaped, non-laminated clot, so that very little or no blood could enter or leave the sacs, but flowed through an aorta of which the diameter was nearly normal. In one case

the tumor was so superficial that pressure upon it undoubtedly influenced the lumen of the aorta, and so murmur could be developed not present under ordinary conditions; but in neither was there any constant bruit or murmur, and yet in both these instances death resulted immediately from the presence of these enlargements. In the third specimen—viz., an aneurism of the trunk of the cœliac axis—the orifice communicating with the aorta is merely a button-hole slit sufficiently large to admit of the passage of a medium-sized almond, the orifice leading from the aorta into the sac being the dilated cœliac vessel. The point I wish to urge in connection with this specimen is that such an opening from the calibre of the aorta into an aneurism may permit so little blood to enter or leave the sac that no bruit character is imparted to the murmur, and a murmur, if present, may be trifling.

As a second illustration of my argument, I would invite a mental review of the many associated minor evidences (so called because not including bruit) of aneurism, as detailed in reports of clinical cases. I am at a loss how to condense this part of the subject into the limits proper on this occasion. Let me merely cite, as representative of many, two cases reported in the *Medical Times and Gazette*, January 31, 1880, under the care of Dr. Broadbent. In one of these cases, post-mortem revealed an aneurism "as large as a hen's egg, its anterior surface firmly adherent to the sternum, its posterior portion to the trachea; it contained some firm laminated clot, with considerable disease of the rest of the arch of the aorta and of the thoracic part of the vessel. . . . The indications of aneurism were obscure; the sac was not large enough to give rise to extensive dulness on percussion, the only evidence being the compression of the left innominate vein, producing engorgement of superficial veins on that side, and pulsatile movement of the trachea and larynx." Yet notice as I again quote from the history: "there was tenderness with decided wincing on percussion of the chest, especially on the sternum and epigastrium, with pain in the upper interscapular region." I note that this pain continued as a marked symptom till the death of the patient. The pain was increased by exertion, attended by dry cough (meaning pressure) and a throbbing feeling at the mid-sternum when he walked. Further, "food seemed to stick in the root of the neck, as though a round, hard ball was in the œsophagus, and often it would be returned just as it was when swallowed. There was loss of flesh; depreciation of nutrition had been continuous; there was some difference in the radial pulses, the right being weaker than the left when the arms were raised above the head." His family history embraced the following facts: mother died of cancer; patient had suffered from rheumatic fever, and had lived a life involving severe tests of his arterial system. "He had been a heavy beer-drinker, and had formerly a good deal of saddle-work in connection with stag-hounds." In this case the diagnosis was not made certain, apparently because a murmur was not present.

An analysis of a second case shows antecedents of patient to have been good, but his occupation was that of a coal-heaver; age, 30. Symptoms were, pain running down right arm, then cough, then swelling near the right shoulder, under the clavicle; also dyspnœa, which became extreme on exertion; moreover, effort increased the gravity of all the symptoms; at times the breathing became stridulous. There was cough, which increased relatively with the increase of the swelling near the shoulder; there was continued loss of flesh, but he retained a fair appetite; pulse on right side preceded the left; the left pulse and left carotid pulsation were very feeble. There was visible pulsation on the right side, extending over an area of two or three inches in front of the chest, just to the right of the median line, causing some heaving upward of the sternal end of the clavicle; but no bruit could be heard at any time while the case was under observation. Yet at the time there was no difficulty in making the diagnosis, because the associated symptoms were so unequivocal; but I read, "when the patient left the hospital, the symptoms had so much ameliorated, the diagnosis would have been difficult for a person seeing the patient for the first time."

One case more, from my own notebook. Patient 26 years old; previous history of syphilis; occupation, shoemaker. His work commenced as an apprentice in his fourteenth year; without intermission he had worked at his trade ever since, excepting for three years in which he per-

formed laboring work. The trade of shoemaking compelled him to hold a boot or board against his chest while working. He entered the hospital for acute rheumatism. Examination of the heart revealed no murmur, but a blowing systolic murmur could be loudly heard in the arteries of the neck, and down the aorta posteriorly. Anteriorly it is best localized at the junction of the left second costal cartilage with the sternum. The pulse in right radial artery much fuller than the left, and with a perfectly well marked trip-hammer or Corrigan pulse-quality. There was very slight dulness over the upper left border of the sternum; slight pain on pressure at this point. In this case, as in most others, these obscure phenomena were more thoroughly appreciated, and the diagnosis of aneurism made with greater certainty, by an analysis of the evidence in the following sequence. Let the mind be imbued by the belief that aneurismal tumors are always associated with or preceded by a diseased condition of the contiguous layers of the internal and middle coats of the vessel, a tissue-growth terminating in degeneration, which, by impairing the elasticity and contractility of the walls of the vessel, allows of their expansion and dilatation even under the tension of the normal arterial blood-pressure, or this abnormally increased by any cause, such as occupation, which acts as a fostering agent to the seeds already sown by the structural changes. In the second place, I believe that the structural change is in association in a major number of instances with syphilis, and in the order named with the other causes of endo-arteritis (atheroma),—viz., intemperance, Bright's diseases, and rheumatism.

In regard to the influence of syphilis, I have drawn my conclusions from observations in the Philadelphia and University Hospitals. In the former institution I have found a distinct or probable history of syphilis in fifty-five out of my sixty-nine cases. In the latter hospital all the cases to which I have had access in two years—some five or six in number—were associated with a syphilitic history. In a paper on aortic aneurism in the English army* the statement is made that, out of thirty-four cases occurring in the Royal Victoria Hospital, Netley, seventeen had a distinct and five a probable syphilitic history; three of associated syphilis or extreme indulgence in alcohol; two with well-marked rheumatic diathesis associated with acute manifestations; and only six without report as to systemic condition. The same writer states that, out of one hundred and seventeen cases, 46.1 per cent. of the cases gave undoubted syphilitic history, 6.8 per cent. more a probable history of syphilis; 21.3 per cent. occurred in phthisical subjects, 5.9 per cent. with heart-disease, 5.7 per cent. with various diseases, 14.2 per cent. without record as to constitutional state.

Ziemssen states that aneurism is eleven times more frequent in the English army than in civil life. The former writer believes army life the equivalent to a statement "laborious life," and that this acts as an exciting cause second to the predisposing causes cited: so that our first step, in my estimation, is one in the direction of etiology. (2) In the second place, study carefully the pressure-symptoms in view of the already-determined etiology: this will alone be usually sufficient to enable us to differentiate aneurismal pressure-symptoms from other tumors, even though murmur be absent. Mistakes in discrimination between the pressure-symptoms of morbid growths can thus be often avoided. For example, the causes of aneurism lead to its development in daily life. Chiefly it occurs between the ages of twenty-six and forty years, after which, if blood-vessel lesion occur, it will oftener be of the variety known as equable dilatation of the aortic coats,—since atheroma in these cases is not so apt to be inflammatory as due to a prior fatty degeneration of the aortic tissues. Time will fail me to allude in detail to these symptoms; but I am sure that pain of a persistent character, mitigated by changes of attitude, indicating that the pain is of mechanical origin, and that change of posture will remove the pressure from the tissues,—this sort of pain is a cardinal pressure-symptom, which must be early sought out and recognized. For example, in the cases cited, the pain as a pressure-symptom was manifest in all, more or less pronouncedly, and the associated symptoms, when correlated on this method, point distinctly in one direction, whereas they might otherwise be ignored, or not given sufficient importance to be of value. Careful percussion of the sternal region will often be helpful. Over this bone we normally find resonance, but by percussion, particu-

* Medico-Chirurgical Transactions for 1876.

larly if made during the forced expiration, when the lungs are separated from the contiguous aorta, slightly impaired resonance can be demonstrated over the aortic tract, if aortic enlargement exists. Questions as to the value of murmur are, I think, adjudicated by the axiom that murmurs are heard with maximum intensity at that portion of the circulatory tract where the cavities in which the murmurs are generated approach closest the chest-surface. Thus a murmur becomes strikingly indicative of aortic lesion when heard with maximum or equal loudness over that vessel. As the outcome of my special study, I believe that when a murmur is prolonged and systolic it indicates a simple dilatation of the aorta, or that the tumor connects with the aorta by a very small opening, as typified in the aneurism of the cœliac axis which I cited in the early part of this paper, or else that the tumor is filled with clots of fibrin. The latter point is confirmed if the murmur is more muffled than usually noted in aneurisms containing blood, which are relatively equally superficially or deeply situated.

There is one symptom to which I would like to direct your special attention, as I have occasionally observed it as indicative of aortic enlargement,—viz., the Corrigan pulse without aortic regurgitation. In an elaborate paper Dr. Galabin* has shown that this pulse may exist without aortic regurgitation, as an exaggeration of the normal pulse brought about by relaxed arterial tension; and he cites many sphygmographic tracings to illustrate his position. I have not noticed a typical Corrigan pulse, except in aortic regurgitation, or a state of aortic enlargement, probably dilatation. I say "probably," because the cases are still living. I can understand that in an enlarged atheromatous aorta the recoil of the blood after the cardiac systole may be as marked as in cases of aortic regurgitation; for the blood is almost always powerfully propelled by an hypertrophied ventricle (though cardiac hypertrophy is not necessary to develop this pulse); but, as the vessel is above normal size, the volume of blood is not sufficient to distend the vessel and develop a gradual arterial systole to propel it forward, but the aortic recoil is abrupt, and the jerking pulse is the consequence. If the crasis of the blood is impaired, as in anæmia, there may be an intensified Corrigan pulse; but I have not noted the peculiar characteristics of the Corrigan pulse in simple anæmia, or in cases of relaxed arterial tension.

Finally, then, in regard to the special symptomatology of aortic aneurism, each case is a special study, and I am well aware that the palm of successful diagnosis will most frequently reward the observer who includes the sum of the evidence of the symptomatology in his judgment. But, by the method of study I suggest, the associated symptoms of aneurism are brought into relief, and under-estimation avoided. The importance of accurate diagnosis cannot be over-estimated. "To know our enemy is, if not 'half the battle,' at least a most important part of it."

In dealing with disease, accuracy in diagnosis is only second in importance to therapeutics, the science of therapeutics being based upon the tripod of physiological experimentation, clinical observation, and comparison, combined with pathological research.

February 23, 1881.

* Medico-Chirurgical Transactions for 1876.

ETHYLENE BICHLORIDE AS AN ANÆSTHETIC AGENT; WITH A CONSIDERATION OF ETHYLENE METHYLETHYLATE, ETHYLENE ETHYLATE, ETHYL NITRATE, AND ETHYLIDENE BICHLORIDE.

BY EDWARD T. REICHERT, M.D.

(Continued from page 492.)

THE Pulse.—The pulse-rate is invariably and decidedly increased, even in the most profound narcosis, and not until near death does it approach or fall below the normal, as the following records will show, which have been copied from kymographion tracings:

Exp. I. (*October* 5, 1880).—*Rabbit.*

Time. M. Sec.	Pulse in ten sec.	Remarks.
1.	37	
.05		Commenced inhalation by Woulfe bottle. The animal was previously curarized, and artificial respiration was resorted to, the apparatus being connected with the Woulfe bottle.
.15	37	
.55	38	
2.35	46	
3.15	48	
.55	45	

Time. M. Sec.	Pulse in ten sec.	Remarks.
4.35	48	Anæsthetization complete. Maximum increase 11, or 29 per cent.

Exp. II. (*October* 6, 1880).—*Rabbit.*

Time. M. Sec.	Pulse in ten sec.	Remarks.
1.	45	
		Commenced inhalation as previously on an animal similarly rendered immovable.
.25	46	
.45	45	
2.05	47	
.25	48	
.45	58	
3.05	53	Animal anæsthetized.
.25	55	
.45	61	
4.05	54	
.25	47	
.45	54	
5.05	52	Maximum rise 16, or 35 per cent.

Exp. III. (*October* 7, 1880).—*Rabbit.*

Time. M. Sec.	Pulse in ten sec.	Remarks.
1.	33	
.05		Commenced inhalation with the use of the cone of muslin, it being held over the tracheal tube.
.20	37	
2.	38	
.40	45	
3.20	42	
4.		Added more ethylene to inhaler.
.40	48	
5.20	48	
6.	47	Respirations ceased.
.40	47	
7.20	45	
8.	47	Respirations commenced, but are shallow.
.40	44	
9.	46	Respirations became slower and deeper, and finally ceased. The heart continued beating for at least four minutes, and gradually ceased. Maximum increase 15, or 45 per cent.

Exp. IV. (*October* 9, 1880).—*Rabbit.*

Time. M. Sec.	Pulse in ten sec.	Remarks.
1.	36	
.03		Commenced inhalation by the use of the linen cone.
.07		
.32	39	
.42	39	Arterial pressure falling slightly.
2.07	49	Arterial pressure rising slightly.
.27	46	The arterial pressure slowly rising; the pulse-curves are about one-third the height of the normal; the respirations are scarcely perceptible.
.47	46	Arterial pressure a little lowered, and equalling about seven-eighths of the normal.
3.07	48	
.27	46	Arterial pressure rising slightly.
.47	46	
4.07	48	Arterial pressure falling, and equalling about three-fourths of the normal.
.27	45	
.47	50	Arterial pressure falling slightly.
5.07	54	
.47	45	
6.07	46	
.27	48	Arterial pressure falling slightly.
.47	44	Arterial pressure falling, and equalling about five-sevenths of the normal.
7.		Added more ethylene to inhaler.
.07	46	
10.	45	
.20	46	
.40	46	
11.	46	
.20	45	
.55	46	
.58		Added more ethylene to inhaler.
12.15	46	
.35	46	
.55	46	
13.15	46	
.40	45	
15.	46	
17.	43	
20.	43	
.20	43	
.30		Added more ethylene to inhaler.
.40	45	
21.	50	
.20	48	
22.15	45	
.35	42	
.55	47	
23.15	45	
.35	43	Arterial pressure one-half of the normal.
24.15	43	
25.35	40	
26.05	42	
.25	47	
.45	42	
27.05	43	

Time. M. Sec.	Pulse in ten sec.	Remarks.
.25	42	Arterial pressure three-eighths of the normal. Maximum increase 18, or 50 per cent.

At the time of the conclusion of this record the pulse-curves had become so small as to be indistinguishable, and the tracing made by the marker was but a mere streak. When the fingers were placed on the chest of the animal, only a faint movement of the heart was perceptible, and the action of the viscus was more like tremors than distinct pulsations. The respirations at this time, if they were present at all, were so shallow that they were indiscernible.

The animal was allowed to remain undisturbed for about two minutes, and when a further examination was made the movements of the heart were found to be so feeble as to be almost inappreciable, and not the slightest respiratory movements were detected. The heart still possessing some vitality, it was thought that by attaching the artificial respiration-apparatus to the tracheal tube the respirations might possibly be restored and the moribund animal revivified. This was done, and after the lapse of two minutes not the least evidences of respiratory movements or of a restoration of the vitality of the almost paralyzed heart were present, and, as all signs of life save the almost imperceptible movements of the heart were gone, the animal was given up as being of no further use, and the artificial respiration-apparatus detached. In a few moments, however, it occurred to the writer that as this drug was probably both a cardiac and a respiratory depressant in toxic amounts, and that, as previously stated, death invariably occurred from a paralysis of the respiratory movements, we would have an invaluable antidote and revivifier in the nitrites if what the writer asserted in a recent article* was true, which was to the effect that the nitrites, in small or moderate doses, were powerful respiratory and cardiac stimulants, and, although the long-continued absence of respiratory movements and the almost complete extinction of all the vital functions were points decidedly against a successful result of such an experiment, yet, while a negative result would not therefore materially disprove the above assertion, the opposite result would be strong, if not almost conclusive, testimony in its favor. The amyl nitrite was quickly obtained, and in a few moments as many drops (probably five) were quickly injected into the tracheal tube, and the artificial respiration-apparatus again attached, so that the vapor of the nitrite would be forced into the lungs and thus become absorbed. In a few moments, to my intense gratification, the almost paralyzed heart seemed invested with a new life, and every moment its lost powers were being rapidly restored, the pulse-curves gradually increasing in height and volume, and in a less time than it takes to pen these notes were equal to the normal, and the heart was pulsating at the rate of forty beats in ten seconds, or four pulsations above the normal. The respirations did not recur for at least two minutes, and were then both shallow and slow, but in a few moments they had become so rapidly restored that they occurred at the rate of thirty-six per minute; two minutes later they were twenty-two per minute; at the seventh minute they were again thirty-six and the pulse in ten seconds forty-two; at the eleventh minute they were forty-two; at the fifteenth minute they were fifty-one and the pulse in ten seconds forty-two. Several drops of the nitrite were twice injected into the tracheal tube since the first recurrence of respiratory movements.

At the commencement of the inhalation of the amyl nitrite the arterial pressure was about one-third of the normal, and at the end of fifteen minutes it had not materially changed either one way or the other, although slightly lowered, which was quite contrary to what might be expected, since there was an augmentation of the frequency as well as of the force of the heart; but when it is remembered that the nitrites cause such intense vaso-motor dilatation, and that, notwithstanding the fact of their being decided cardiac stimulants, they cause a decided lowering of the blood-pressure in normal animals, the explanation of this apparent anomaly is evident. That we have in the nitrites an invaluable class of physiological antidotes for this compound is so clearly proven by the above as to need no further comment.

To return to the results of the preceding

* American Journal of the Medical Sciences, July, 1880, p. 158.

four experiments made on normal animals. It will be noticed that a decided increase in the pulse-rate invariably occurs, and that this increase continues far above the normal until immediately before death (Exp. III.), when it gradually failed, the increase being, respectively, 29, 35, 45, and 50 per cent., and the average about 40 per cent. The pulse-curves were diminished (Exp. IV.), and the arterial pressure decidedly lowered. In order to determine the *modus operandi* of this increased pulse-rate, it was first sought to decide whether the vagi apparatus was concerned: so the following experiment was made, in which both vagi nerves were severed, a tracheal tube was inserted, and the ethylene given by inhalation from a muslin cone, with the following result:

Exp. V. (*October* 13, 1880).—*Rabbit.*

Time. M. Sec.	Pulse in ten sec.	Remarks.
		Cut the pneumogastric nerves.
1.	35	
.03		Commenced inhalation.
.10	35	Arterial pressure reduced about one-tenth of the normal.
.30	34	
.50	34	
2.10	37	Pressure rose since 1.50, and is now about one-tenth of the normal above it. The respirations had now become very frequent, and for one minute the pulse-curves were not traced, only the respiratory curves.
		The respirations, which were normally seven in twenty seconds, are now increased to thirty-seven.
		The arterial pressure falls gradually until 3.15, when it reaches one-tenth below the normal; it then arose slightly, followed by a fall to the former point.
3.20	42	Pressure one-tenth below the normal, and gradually declining.
.40	42	
4.	42	
.35	42	
.55	42	
5.15	50	
.35	52	
.55	53	
6.30	46	Pressure one-fourth below the normal.
.50	45	
7.10	45	
.30	44	
.50	45	
8.25	46	
.45	45	
9.05	46	Pressure about five-twelfths below the normal.
.25	46	
.45	47	
13.	45	
.20	46	
.30		Added more ethylene to inhaler.
.40	44	
14.	45	
.20	43	
.32		Respirations ceased.
.40	38	
15.	29	
.35	26	
16.15	27	
.55	28	
17.25	26	
.45	27	Since the fifteenth minute the pressure has gradually declined, and is now about one-fourth of the normal.
.55		The cardiac pulsations are so feeble as to be imperceptible, and at 18.25 the pressure fell to zero.
		Maximum rise 18, or 51 per cent.

It will be noticed that the result in this last experiment is identical with those made on normal animals, with the exception that a rise of the arterial pressure occurred which went above the normal. The pulse-rate was increased 51 per cent., which was as much as the greatest increase in any of the preceding observations, and, although the pulse-curves were not referred to in the preceding remarks, yet the same diminution of their size was apparent. It is therefore evident that the increased pulse-rate occurs independently of the pneumogastric nerves, and that it must be due either to a direct cardiac action or to a stimulation of the accelerator nerves. The determination of this point is satisfactorily accomplished by making, in the same animal, a combined section of both the cervical spinal cord and vagi nerves (in the section of the former the accelerator nerves are severed before their exit from the cord). This operation has been done in the two following experiments:

Exp. VI. (*October* 12, 1880).—*Rabbit.*

Time. M. Sec.	Pulse in ten sec.	Remarks.
1.	41	
.10		Commenced inhalation by Woulfe bottle.
.30	38	
.50	38	
2.40	35	

Time. M. Sec.	Pulse in ten sec.	Remarks.
3.	34	
.20	36	
.40	40	
4.05	40	
5.	37	
7.	24	
9.	21	The pulse continues failing.

Exp. VII. (*October* 14, 1880).—*Rabbit.*

Time. M. Sec.	Pulse in ten sec.	Remarks.
1.	39	
.10		Commenced inhalation by Woulfe bottle.
.20	32	
.40	30	Pressure has fallen one-half of the normal, and is still declining.
2.15	35	
.35	27	
.55	20	
3.15	20	
.40	34	
4.	34	
.20	34	Pressure about one-third of the normal.

These results being directly the reverse of what has hitherto been recorded, it is very evident that the increased pulse-rate such as occurs in normal animals is dependent upon a stimulation of the accelerator nerves. Were it dependent upon the heart, the increase would still be apparent in animals operated on like the above, but which is not the result here; and it is an interesting fact to note that instead of the increase we have a diminution below the normal from the first; and the fact that the heart is isolated from the reception of any centric influences shows that the decline of the pulse is due to a depression of the heart itself. The consentaneous occurrence of a diminished pulse-rate, diminished pulse-curves, and diminution of arterial pressure decidedly indicates cardiac depression, and is undoubtedly due to this, unless it be the diminution of arterial pressure, which may possibly, to a considerable extent, be due to vaso-motor dilatation.

A decided increase of the pulse-rate occurring in normal animals or in those having the accelerator nerves intact, and a diminution occurring in those in which the nervous connections of the heart were severed, is an exceedingly interesting point, and shows that the heart in normal animals is affected consentaneously in a dual manner, and that these two forces are in constant antagonism, the one tending to cause an increase through a stimulation of the accelerator nerves, and the other a diminution by a direct paralyzant action on the heart. And it is evident that the effects of the stimulation of the accelerator nerves are more intense than those of the direct action on the heart: hence we have the increase. In two dogs, one in which the fibres of the accelerator nerves were cut a little below the medulla oblongata, and to which intravenous injections were given, the results, as the following records show, are confirmatory of what has already been stated.

Exp. VIII.—Dog.

Time. M. Sec.	Pulse in ten sec.	Remarks.
1.	16	
.10		Injected thirty minims intravenously.
.22		The blood-pressure fell rapidly to one-half of the normal; deep respirations and struggles sent it up to normal twelve seconds later; it then commenced to decline, reaching one-half of the normal at thirteen seconds later; and then commenced to rise gradually, reaching to within one-eighth of the normal at the fourth minute.
.40	23	
2.20	23	
.40	23	
3.	25	
.20	25	
.40	23	
4.20	22	
.40	23	
5.	22	
.20	21	
.40	19	
6.	20	
.20	19	
.40	20	Maximum increase 9, or 56 per cent.

Exp. IX.—Dog.

Time. M. Sec.	Pulse in ten sec.	Remarks.
1.	25	Cut the spinal cord a little below the medulla.
.05		Injected thirty minims intravenously.
.20	25	
2.	23	
.10	22	
.20	23	
.30	21	
4.	20	
.20	21	
.45	22	

(To be continued.)

EXPERT MEDICAL TESTIMONY.

BY C. H. BOARDMAN, M.D.

TO the evils inseparably associated with the existing system of procuring so-called expert evidence which are set forth in Dr. Reese's thoughtful paper in a recent number of the *Medical Times* might be added one which, while less calculated than its congeners to bring the science of medicine into disrepute, is potent in defeating the very *raison d'être* of such evidence.

The physician whose services are desired is sought by the counsel for either of the parties to the suit, who lays before him a purely *ex parte* statement and requests thereupon an expression of his opinion. The narrative is plausible, and, whether inadvertently or otherwise, there is usually no reference to modifying or ameliorating circumstances, a knowledge of which might have no little weight in determining the witness (*in posse*) as to the proper course to be pursued. He is naturally impressed by the story thus forcibly presented, and, unaccustomed to weighing evidence,—unable, indeed, to weigh it, since he holds but one-half of the scales,—he becomes a victim to that scourge of the human race, hasty generalization, and straightway appears in court, not as an unbiassed witness whose function it should be to decide scientific questions beyond the ken of the jury, but as an advocate, pure and simple, who desires chiefly that the cause for which he appears shall triumph, and who, becoming heated as the fires of cross-examination grow hotter, is very apt insensibly to color his evidence that it may correspond with the mental verdict at which he has long since arrived.

The inevitable result of a system which brings forth such fruits is seen in the present status of expert evidence in our courts, where it is no uncommon thing for juries to throw out the whole in finding their verdict, paying no more attention to it than though it had never been. That this should be the case is a blot upon the fair fame of our profession, and it is felt as a reproach and a disgrace, especially by those physicians who are practically conversant with forensic medicine, and who are rightly jealous for the good name and reputation of their chosen calling.

The existence of grave abuses in our system of medical jurisprudence is very generally recognized by physicians; it furnishes a text for numerous threnodies in the Transactions of our various State medical societies; but as yet no determined or systematic effort has been made to remedy the evil. If the proper remedy can be devised, then, doubtless, energetic concert of action will result in its adoption, and we shall rid ourselves of the opprobrium which, in this respect, now rests upon us.

It has long seemed to the writer that the ideal system is that to which reference is made by Dr. Reese,—viz., the Imperial Commission of Prussia, of which Casper was so long the honored chief; but, at the same time, it is perhaps a question whether such an organization is practicable in this country, and the plan proposed by Dr. Reese is more in harmony with the genius of our institutions. It may be, however, that a measure which the Legislature of Minnesota was solicited to adopt at its recent session would be still more acceptable, and, if not productive of as good results, it might provoke less opposition and prepare the way for subsequent improvements.

The proposition as urged upon the Judiciary Committee of the House was as follows: Counsel for both parties shall prepare lists of physicians whom they are willing shall be called as witnesses, and from these lists the court shall select a certain number (say three or five), who, subpœnaed by the State, shall, after hearing all the evidence, express their opinion, having a previous consultation, if so desired. The defendant, of course, retains the right to summon his own experts, if he wishes to do so.

It is not claimed that this scheme is the best that can be devised, or that it is free from objections, but it is a vast improvement upon the method now in vogue, and, as said before, it is believed that the attempt to secure its adoption would arouse but little opposition, while a determined hostility would probably be arrayed against a more radical measure of reform. It does not provide, as does Dr. Reese's plan, for a State toxicologist, but, if it be thought best, such an official might be appointed, thus combining Dr. Reese's scheme with that proposed in this communication.

If our various State and County organizations will but agree upon some practicable substitute for the absurd and anom-

alous proceedings now relied upon in our courts, it cannot be doubted that an intelligent and combined effort will secure its adoption, since a reform so greatly needed would be welcomed alike by the members of the professions of law and medicine.

ST. PAUL, MINNESOTA.

OVERDOSING AND GIVING DISAGREEABLE MEDICINES UNNECESSARILY.

BY WALTER C. STILLWELL, PH.G., M.D.

A SHORT time since, in conversation with a druggist who compounds prescriptions from a great number of different physicians, he spoke of the large doses which some of them gave, and, to illustrate, he got down his prescription-file for that day and showed me a recipe for powders of cubebs, alum, and cinnamon so large that one of them filled twice a tablespoon heaping full, and when mixed in a half-glass (four ounces) of water it made a dose that almost any human being would rebel against. Now, as two or three drops of the oil of cubebs and one-tenth of a drop of that of cinnamon would represent the amount of the respective remedies, a pleasant instead of an offensive compound could readily have been made.

Here is the latest treatment for tapeworm, reported in a recent number of a medical journal,* and noticed in the *Times* (No. 341), and, as it has a bearing upon the subject, I repeat the main features of the treatment: "The patient takes a dose of castor oil, then milk diet for twenty-four hours, and no other food except a salad of salt herring, onions, and garlic; then he takes a mixture of a decoction of pomegranate-root, ethereal extract of male fern, sulphuric ether, fluid extract of valerian, croton oil, and honey." At this period of the treatment the patient can take more herrings and onions, if he wants them. "As soon as the mixture produces colic, an ounce of castor oil is administered hourly until the worm is expelled."

If the patient lives through all this, and the worm succeeds in clinging to the mucous coat of the intestines after passing through such an ordeal, it deserves to remain there unmolested the remainder of its existence. It is such barbarous treatment as the foregoing which sends patients to homœopaths.

A prescription was presented at a drug-store to be compounded, not long ago, containing a number of ingredients, among them a preparation of iron and also a vegetable astringent. It was compounded and delivered to the patient; he immediately returned it to the store, with the remark that "he did not want ink." The druggist referred him to the physician who prescribed it; he told the patient that "if he prescribed ink it was his place to take ink;" and he did, and when he had any writing to do he would use his medicine as a writing-fluid, and when his inkstand wanted replenishing he would always get his prescription renewed.

I am satisfied that the followers of Hahnemann get many patients which they would not otherwise by the regular practitioners dosing children with disgusting medicines, for how often do you hear mothers say that they consider homœopathic medicine is "good for children"! I do not wish to be understood as advocating trifling with disease by using mild means merely to please the patient and gain credit for giving agreeable medicines, for I believe in administering any drug, no matter what is its character, when there is urgent necessity for it.

I think this subject is not sufficiently appreciated by physicians generally, as there is certainly room for great improvement in the preparation and the proper combining of remedies, so as to suit the patient's palate as well as his system.

I am accustomed to have made up at a drug-store a recipe which could be called either a syrup or an elixir; I give it for what it is worth. A half-fluidounce of the compound added to a four-ounce mixture containing disagreeable-tasting medicines, such as bromide and iodide of potassium, bichlorate of sodium or potassium, quiniæ sulph., and many others, will cover a multitude of imperfections in a prescription as regards color, taste, etc.

This is the formula:

℞ Aurantium cortex recens, i;
Sem. anisi (cont.), ℥ij;
Sem. cardam. (cont.), ℥i;
Sem. fœniculi " ℥ij;
Coccus cacti " ℥i;
Sacch. albæ, ℥xxxij;
Sp. vini rect., f℥iv;
Aquæ, Ojss.

* New York Medical Record, November 20, 1880.

Macerate all of the ingredients except the sugar in the alcohol and water for four days, filter, and dissolve the sugar by the aid of gentle heat, and strain it while warm.

TRANSLATIONS.

EXPERIMENTAL RESEARCHES IN THE ABSORPTION AND ACTION OF METALLIC MERCURY.—Dr. Paul Fürbringer (*Virchow's Archiv*, Bd. lxxxii. p. 490) says that two questions remain to be solved with reference to this subject. 1. Does the metallic mercury of gray ointment penetrate as such into the system in ordinary inunction? 2. Is the metal oxidized by contact with the juices of the system?—that is, is it changed into an active soluble form? Dr. Fürbringer says that the first of these questions has been answered first affirmatively, then negatively, by successive investigators; the second question has only been investigated in the reagent-glass, and the result transferred to the account of the organism.

In investigating the subject, Dr. Fürbringer divides the first question into three parts, depending upon the method of absorption: (*a*) in the place of application, by mechanical passage of the globules through the skin; (*b*) by breathing the vapor; (*c*) by the penetration of the vapor through the skin.

After giving a thorough examination of the rather contradictory results obtained by previous observers, Dr. Fürbringer details his own careful experiments under these heads, with the conclusions which he has reached, and which are as follows: 1. By inunction with fresh gray ointment (free from oxidized mercury) into the intact skin and mucous membrane the metallic globules are forced into the hair-follicles and sebaceous follicles in the place of application, and, under the influence of the glandular secretion, are changed into a soluble absorbable combination. 2. The mercurial vapor taken in by respiration condenses in a metallic form on the accessible portions of the mucous membranes, and, remaining there, is gradually changed into an absorbable, soluble oxidized compound. On the other hand, neither do the metallic constituents of gray ointment penetrate through the uninjured skin at the point of inunction, nor does the metallic vapor penetrate through mucous membrane or skin to exist as such in the blood. In abraded skin, however, opportunity is given for the passage of metallic mercury into the circulation at the point of inunction by the existence of bleeding points in the skin. So soon as metallic quicksilver comes into contact with the living blood it is changed into a soluble active compound. Apart from this mechanical penetration of metallic quicksilver, the drug can only get into the system as above mentioned by becoming changed into some soluble salt when in contact with some denuded spot. [Fürbringer's results, though in contradiction to those of several investigators of distinction, appear to be founded on such complete and careful experiments as to make it likely that they will influence the present views on the subject of the absorption of metallic mercury.—ED.]

NERVE-STRETCHING—At a recent meeting of the Societé de Biologie (*Le Progrès Méd.*, 1881, p. 217), M. Quinquaud mentioned a case where he had stretched the frontal nerve for supra-orbital neuralgia. A little later one of his colleagues had performed the same operation for epileptiform neuralgia of the face, and also for a supra-orbital neuralgia. The first and third of these operations had been successful, the second less so. But in the two successful cases complete anæsthesia had supervened, which continued up to the present time. On the other hand, in the case of epileptiform neuralgia the anæsthesia following the operation only lasted a few hours. It follows from this that in such operations anæsthesia must follow if the cure is to be permanent. The explanation of the cure in these cases of nerve-stretching has been in dynamic action; but practical knowledge has hitherto been wanting. M. Quinquaud now supplies this lack by experiments upon animals. He has ascertained that when the nerve is stretched, if the cure is to be permanent, persistent anæsthesia must be produced. On the other hand, in cases where anæsthesia has been produced, secondary degeneration can be observed in a considerable number of nerve-tubules. Some show their myeline granular and segmented, others are completely emptied, others are intact. M. Quinquaud concludes that what is required is complete anæsthesia, not by dynamic action, but by anatomical change. In the discussion which followed, M. Dumontpallier remarked that in the case re-

ported by M. Debove and himself, neuralgia was relieved by nerve-stretching, but anæsthesia did not follow. M. Quinquaud replied that in the case of this same patient a recent examination by M. Laborde had shown complete anæsthesia.

Later in the course of the meeting, M. Laborde presented, for M. Marcus, the results of some experiments of the latter on nerve-stretching in the guinea-pig. On the third day after operation, examination showed some nerve-fibres intact, while others were altered with segmentation of the myeline. In the cat the same results were obtained, but more slowly. A curious fact was that the degeneration took place only in the central portion of the nerve; the peripheral portion remained intact. Without taking this result for granted, M. Laborde thought that the effect of the compression sustained by the nerve at the point of traction could be seen in this last result.

Visceral Atrophies consecutive to Inflammation of Serous Membranes.—From a review of a work on this subject by Dr. A. Poulin, in *La France Médicale* (1881, p. 382), we learn that atrophy of the lung may be produced as a result of inflammation of the serous membranes by two somewhat different processes. In most cases the parenchyma of the viscus is compressed by abundant serous effusion. This not being absorbed, a thick neo-membrane covers the visceral pleura and the compressed lung in a sort of husk, preventing its expansion entirely. When finally the serous effusion has disappeared, the lung is incapable of dilating, its atrophy is complete, and the void left between it and the thoracic wall is closed by the contraction of the latter. In rarer cases, when the pleurisy is dry, the two reflections of the pleura become adherent, prevent expansion on the part of the thoracic walls, and thus draw in the thorax, compressing the lungs at the same time. In addition, a "pleurogenetic pneumonia" may be brought about when fibrous bands form in the lung itself.

As regards the liver, atrophy by perihepatitis is rarer, and is sometimes difficult to distinguish from atrophy the result of cirrhosis, which is frequently accompanied by thickening of the serous envelope. In certain cases of chronic peritonitis the thick neo-membranes formed develop over the surface of the liver and mask it entirely. The diminution in the volume of the organ which almost always exists in these cases is due to a complex morbid process: direct compression of the hepatic gland, according to Cruveilhier; propagation of chronic inflammation to the interstitial tissue of the liver, according to Thierfelder; obstruction of the circulation in the narrowed hepatic vessels, according to Murchison and Hilton Fagge. Poulin gives the first place among these causes to compression of the vessels. Superficial cirrhosis by propagation, though it has been demonstrated to exist by numerous observations, appears to exercise a minimal influence.

Plastic Operations on Muscles and Tendons.—Gluck (*Cbl. f. Chir.*, 1881, p. 168; from *Archiv f. Klin. Chir.*), who has succeeded so well in transplanting bits of nerve, has recently transplanted bits of muscle, with and without tendon, also successfully. In a series of researches upon chickens, a bit of muscle the size of a dollar was extracted, and its place filled with muscle from a rabbit, which invariably grew in without difficulty and often showed the muscular structure without change. In a second series of researches in chickens, a bit of the gastrocnemius was cut out, with some tendon attached, and replaced by a somewhat larger piece from the corresponding part of another chicken. This piece, together with its tendon, grew in successfully. Forty days after the operation the new muscle showed its specific action. An energetic process of regeneration only showed itself when the inflammatory reaction was as far as possible eliminated. Where there is decided inflammation, the transplanted portion is more or less changed into a fibrous mass; that is to say, the whole muscle is changed into a semi-membranosus by the plastic operation. This would have to be taken into account in any operation performed upon man.

A Patient's Agreement to Pay Repudiated by Law.—A paralytic Parisian, having injured his ankle, called in Dr. Alphonse Guérin, the well-known surgeon, who attended him, dressing the limb thirty-one times. For this service he sent in to the heirs of the patient (who died shortly after) a bill for 6900 francs,—$40 per visit. The heirs thought $20 per visit enough, and went to law, when the court decided that no agreement could be made between a patient struggling for life and the person he calls in to save him.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, MAY 21, 1881.

PROCEEDINGS OF SOCIETIES.

THE AMERICAN MEDICAL ASSOCIATION.

THE thirty-second annual meeting of the National Association was held in Richmond, Virginia, commencing Tuesday, May 3, and continuing until Friday, May 6, 1881. Nearly five hundred delegates and members were in attendance.

According to the programme, the meeting was convened at eleven o'clock A.M., with prayer by Bishop J. J. Keane, after which Hon. F. W. M. Holliday, Governor of the State, delivered an eloquent address of welcome.

The Committee of Arrangements announced the order of business, as well as the entertainment and invitations from several sources.

The President of the Association, Dr. John T. Hodgen, of St. Louis, then delivered his annual address, in which he referred to the two types of surgeon,—the bold, reckless operator, and the conservative, timid one,—and warned his colleagues against the temptation to perform brilliant operations when the patient's best interests would be furthered by a more tentative course. On the other hand, he urged early interference in proper cases, such as malignant disease, sarcoma of choroid, rodent ulcer, and sympathetic ophthalmia. Various conditions of the body tend to render an operation unsuccessful: previous vigorous health in itself will prevent a patient from patiently bearing confinement; a strumous constitution, long-continued mental strain, anæmia, and wasting disorders, all tend to reduce the powers of recovery. Imperfect knowledge of many pathological states also would prevent the resort to the knife, in the absence of exact information of the state of the system. After referring to the many advances in operative surgery, he concluded by saying that a more perfect animal chemistry, a more thorough histology, and a deeper search into the possibilities of pathological change will doubtless throw many a ray of light into regions where the darkness is now too dense for our vision to penetrate. To these fields coming generations of physicians will surely be attracted, in the faith that, as man advances in knowledge and approaches somewhat nearer to the comprehension of the perfect wisdom which designed the wonderful physical organism through which he is brought into relation with the world around him, he will be enabled to solve more and more of the difficult problems which now perplex and baffle us, and will gradually raise medicine to a position more nearly akin to that now accorded to the exacter sciences.

The address was attentively listened to and warmly applauded. A vote of thanks was passed to Dr. Hodgen, and the paper referred to the Publication Committee.

Dr. Jos. H. Warren, of Boston, chairman of Foreign Delegates appointed at the last meeting, reported attendance upon the British Medical Association at Cambridge, and gave an interesting report of the proceedings at that meeting. In conclusion, he spoke of the *British Medical Journal*, and advocated the establishment of a similar official periodical by the Association.

PROCEEDINGS IN THE SECTIONS.

SECTION I.—*On the Practice of Medicine, Materia Medica, and Physiology.* Dr. Wm. Pepper, Philadelphia, Chairman; Dr. T. A. Ashby, Baltimore, Secretary.

In the absence of the chairman, Dr. Octerlony, of Louisville, occupied the chair.

Dr. W. C. Wile, of Connecticut, read a paper on "Blood-Letting as a Therapeutic Measure in Pneumonia," in which he advocated the free use of the lancet in the early stage, and reported several cases apparently greatly relieved by the venesection.

Dr. J. J. Lynch, of Baltimore, protested against this method of treatment, as the disease runs its course in spite of the bleeding, and the patients recover just as soon without it. When bleeding was common, the mortality of pneumonia was about twenty-five per cent.; now it is scarcely more than four or five per cent. Dr. Whitaker, of Cincinnati, also entered a vigorous protest against this procedure, which he considered as being unjustifiable. Veratrum viride, also recommended by the lecturer, is a profound cardiac sedative, and might do much harm.

Dr. N. S. Davis advocated the treatment, and Dr. S. D. Gross said that it was applicable to the first stage in young, robust subjects, where he considered it to be the great remedy. The subject was still further discussed until the time of adjournment.

SECTION II.—*On Surgery and Anatomy.* Dr. Hunter McGuire, Virginia, Chairman; Dr. Duncan Eve, Tennessee, Secretary.

Dr. Jos. H. Warren, of Boston, exhibited a number of instruments, among which were catheters and bougies with a screw or vermicular point; a modification of Thomson's evacuating tube for the bladder after crushing a stone, or for removing foreign bodies; a uterine probe with a rotary point, a trocar, and a set of sounds for the urethra or uterus on the same principle. Also a serrated herniotome, torsion forceps, a hernia syringe, and a peculiar dissecting-knife.

Drs. Sayre and Gouley, of New York, could

not discover anything in the revolving point to commend its use.

Dr. Wm. A. Byrd, of Quincy, Ill., reported a case of ulceration of the appendix vermiformis, with remarks upon abdominal section in cases of perforation of the bowel. In the discussion, operative interference was strongly recommended.

Dr. James E. Reeves, of West Virginia, exhibited a renal calculus, weighing 480 grains, from a case of pyonephrosis. A number of smaller calculi coexisted, weighing in the aggregate 416 grains.

SECTION III.—*Obstetrics and Diseases of Women.* Dr. James R. Chadwick, Boston, Chairman; Dr. Joseph Tabor Johnson, Washington, Secretary.

Dr. Paul F. Mundé opened the discussion upon vaginal and vagino-abdominal pessaries, and formulated a number of propositions as guides to their use, as follows:

1. Always be sure of the diagnosis, of the nature and degree of the displacement, before resorting to a pessary.

2. Always replace the uterus before applying a pessary, especially in retro-displacements. Preliminary treatment by frequent replacement and straightening the canal with a sound will often be beneficial.

3. Never insert a pessary when there is evidence, by the touch, of acute or recent inflammation of the uterus or adnexa, or when pressure by the finger on the parametrium (where the pessary is to rest) gives decided pain.

4. When the uterus is not replaceable,—that is, when adhesions bind the fundus down,—use great caution and discrimination in deciding whether an attempt should be made and is justified by the symptoms to elevate the fundus by manual or instrumental means, or whether the elevation should first be tried by the gradual elevation of a pessary (this applies only to retro- and latero-versions). If neither is to be recommended, do not introduce a pessary until local alterative and absorbent measures have effected a resolution of the adhesions.

5. Always choose an indestructible instrument, if possible. This does not apply to prolapsus uteri.

6. Always measure and estimate the vagina carefully before choosing a pessary, and be careful to adjust the pessary in every particular (size, curve, width) to that particular case. No two vaginæ are exactly alike.

7. If the vaginal pouch is not sufficiently deep to accommodate a pessary (anterior pouch for ante-displacements; posterior pouch for retro-displacements), defer the attempt to fit a pessary until the pouch has been deepened by daily tamponing with cotton, or by the upward pressure of a Cutter or a Thomas vagino-abdominal supporter. Or the pouch may be gradually deepened by using first a small (slightly curved in retro-displacement) instrument, and gradually increasing its size (or curve) until the desired size and shape for permanency are reached.

8. Never leave a pessary in the vagina which puts the vaginal walls to the stretch, and which does not permit the passage of a finger between it and the wall of the vagina. This does not apply to prolapsus uteri.

9. A vaginal pessary which projects from the vulva is displaced.

10. A pessary which gives pain must at once be replaced by one which is painless.

11. A well-fitting, properly-chosen pessary should not only give no pain, but should be a direct source of comfort to the patient.

12. Always examine a patient on her feet after introducing a pessary, or when it is desired, at her return, to ascertain its efficiency in sustaining the uterus during walking and exertion.

13. Always tell the patient that she has a pessary in her vagina, or she may not return in spite of your directions, and the pessary may remain for years, to her ultimate great discomfort and danger.

14. Always tell the patient to return within a week after the first introduction, in order that the position and working of the pessary may be looked after, and that, if it does not suit, it can be removed and a better one inserted. Tell her that several trials and various instruments may be required before one is found which she can wear permanently. Also let her return for inspection once every four to eight weeks, as the case may require. Tell her that if she fails to do so the pessary may cause ulceration, for which treatment will be needed.

15. Tell the patient that she will need to wear the pessary for months, perhaps years, before a recovery can be expected.

16. Never introduce a pessary which the patient cannot remove herself.

17. Tell the patient to remove the pessary herself if it gives pain, and show her how to do it. When she has removed it, let her present herself at once for examination.

18. Tell the patient to use daily vaginal injections for cleansing purposes. If she notices profuse discharge, add astringents; if the discharge is sanious or purulent, let her come at once, as the pessary has probably caused abrasion.

19. Tell her on moving the pessary to test the result; that the permanence of the result cannot be determined for several days or weeks.

20. Always direct your patients to relieve all superincumbent pressure by a proper support of their skirts. If the displacement be anterior, aid the pessary by an abdominal supra-pubic pad.

All pessaries may be introduced in the knee-chest position when it is desirable or possible to replace the uterus only in that position. A Sims speculum elevates the peri-

neum, the air enters and expands the vagina, and the pessary (chiefly in retroversion and prolapsus) is introduced by touch and sight, and the patient laid over on her left side. For aggravated retroversion and for prolapsus of ovaries or uterus, this position offers many advantages over the left semi-prone decubitus. Care must be taken to remember that the position of the patient is reversed, and that the pessary must be introduced accordingly.

Dr. R. Beverly Cole spoke in favor of the Hodge pessary and his own modification of it with a spring support for retroversion. He also advocated the use of the galvanic stem pessary in the condition of atony. In conclusion, he exhibited a gas cautery for operations upon fungous growths, etc., and demonstrated the method of moulding gutta-percha, previously softened in warm water, so as to make extemporaneous pessaries.

Dr. Albert H. Smith deprecated the indiscriminate use of pessaries; he did not believe in the galvanic action of the stem pessary mentioned, but considered its effects merely mechanical.

A number of other speakers united in discouraging the use of stem pessaries.

SECTION V.—*On Ophthalmology, Otology, and Laryngology.* Dr. Dudley S. Reynolds, Kentucky, Chairman; Dr. S. M. Burnett, District of Columbia, Secretary.

Dr. W. C. Jarvis, of New York, read a paper on "Nasal Catarrh with Hypertrophy," and advocated transfixion of the hypertrophied portion by curved needles, and its removal by a wire écraseur in preference to the galvano-cautery or the knife. The paper was followed by a general discussion on nasal catarrh and its causes.

Dr. Chisolm, of Baltimore, read a paper on "Conical Cornea," in which a case was reported benefited by tapping with a red-hot needle.

Dr. Little, of Philadelphia, also spoke of a case improved after tapping.

SECTION VI.—*On Diseases of Children.* Dr. A. Jacobi, of New York, Chairman; Dr. T. M. Rotch, Boston, Secretary.

A paper was presented by Dr. H. J. Bowditch, of Boston, on "The Relation between Growth and Disease," in which the rate of development was mentioned as throwing light upon the causation and treatment of children's diseases. He advocated frequent weighing of children, a progressive loss of weight indicating the approach of some sickness. The subject is to be considered by the National Board of Health, which will distribute blank cards for statistical information, some of which were exhibited by the lecturer.

Dr. S. C. Busey, of Washington, presented a paper by Dr. White, of Boston, "On some of the Causes of Infantile Eczema, and the Importance of Mechanical Restraint in its Treatment."

Dr. L. D. Bulkley thought that the author had laid too great stress upon the local treatment, and had ignored hygienic and other means. He approved of the disuse of water, but had never been obliged to resort to the mask.

Dr. Busey read a paper on "The Relation of Meteorological Conditions to Diarrhœal Diseases of Children."

Dr. H. O. Marcy exhibited some elastic double canula injection-tubes for irrigation of stomach, rectum, bladder, vagina, etc.

Dr. D. H. Goodwillie, of New York, read a paper, illustrated by means of a model, on the method of preventing thumb-sucking. The treatment recommended consists in breaking up the habit by applying a leather pad to the elbow, preventing the hand from coming to the mouth.

Coexisting nasal catarrh should be treated by douches and the application of powder blown into the nose, proper food, clothing, and rest.

His conclusions were as follows:

(1.) Thumb-sucking is more disastrous to the health of the child than the sucking of the other fingers, for, the thumb once in the mouth, it more readily remains during sleep.

(2.) It interferes with the child's proper rest, which should be continuous and undisturbed, and so becomes a source of nervous irritation and exhaustion.

(3.) It interferes with the natural respiration through the nose, and sets up abnormal conditions.

(4.) It malforms the anterior part of the mouth, and affects future mastication.

SECOND DAY'S PROCEEDINGS.

The amendment to the Code of Ethics, which at the last meeting was made the order of the day for this session, was brought before the Association by the President. The amendment (to Article I., Paragraph 1st) read as follows: "and hence it is considered derogatory to the interests of the public and the honor of the profession for any physician or teacher to aid in the medical teaching or graduation of persons knowing them to be supporters and intended practitioners of some irregular and exclusive system of medicine."

After a motion to table the amendment had been voted down, the subject was laid over until the next morning.

PUBLICATION OF PROCEEDINGS.

Dr. John H. Packard, chairman of the committee to whom the recommendations of the late President's annual address were referred, made an interesting report, concluding with the following resolution:

"*Resolved*, That the President be authorized to appoint a committee of five to digest and report in detail as soon as practicable upon the time, place, and terms of the publication of such a journal, to elect an editor, fix his

salary, and to arrange all other necessary details."

After some discussion, Dr. Davis moved to strike out so much of the resolution as related to the election of an editor. Adopted. On motion, the secretary and treasurer were added to the committee.

Dr. Toner offered a resolution instructing the secretary to publish, with the forthcoming report of the Transactions of the Association, the index of the proceedings of all the previous meetings. Adopted.

Dr. William Pepper, chairman of the Section on Medicine, read an able address, discussing recent theories of disease, and suggesting that many conditions now considered as typical of blood-poisoning might be due, as originally taught by Broussais, to some internal morbid condition, such as inflammation of mucous membranes, chiefly catarrhal in character.

The chairman of the Section on Obstetrics, Dr. Chadwick, of Boston, read his address upon the Advance of Obstetrics and Gynæcology during the past five years, which contained a valuable résumé of interesting cases, important operations, and statistics of publications in this department of practical medicine.

Both addresses were referred to the Committee of Publication.

Dr. J. M. Toner, from the Committee on Necrology, presented his annual report, which was referred to the Committee of Publication.

PROCEEDINGS IN THE SECTIONS.

SECTION I.—*Practice of Medicine, Materia Medica, and Physiology.* Dr. Wm. Pepper, Philadelphia, Chairman; Dr. T. A. Ashby, Baltimore, Secretary.

By appointment, Dr. King read a paper by Dr. Prentiss, of New York, entitled "Is Croupous Pneumonia a Zymotic Disease?" after which Dr. Dabney read a paper on "The Nature and Treatment of Pneumonia," which elicited an animated and prolonged discussion, without any general agreement, upon the subject of the etiology of pneumonia.

Dr. Robinson, of New York, being absent, his paper was read by title, "On the Nature and Treatment of Pulmonary Phthisis," and referred to the Publication Committee.

Dr. L. Duncan Bulkley, of New York, presented a paper on the "Diet and Hygiene of Eczema," which was deferred until the next afternoon.

SECTION II.—*Surgery and Anatomy.* Dr. Hunter McGuire, Chairman; Dr. Duncan Eve, Secretary.

Dr. Charles F. Stillman, of New Jersey, read a paper on a "New System of Surgical Mechanics," and presented a number of splints. He summed up the advantages of his system as follows. 1. Extension at any angle with motion. 2. Extension at any angle with luxation. 3. Fixation. 4. Motion complete or limited, constant or occasional. 5. Exposure of surface about the joint, admitting compression, elastic or otherwise; hot and cold applications; blisters; dressings; and easy inspection.

Dr. Alfred C. Post, of New York, read a paper on "Plastic Operations on the Face," and reported two cases. The first case which he related was one of epithelioma, involving the left side of the face, about fifty-five millimetres in diameter, extending above to a line within six millimetres of the margin of the lower lid, and below to a line midway between the ala of the nose and the angle of the mouth. The patient was a man 61 years of age. Dr. Post operated by making a horizontal incision separating the morbid growth from the lower lid, and another parallel incision below the tumor, connecting the two by vertical incisions before and behind. He then dissected up from the adjacent parts the diseased mass included between the four incisions, leaving a quadrilateral chasm, nearly of a square form. The two vertical incisions were then extended downward, the anterior one to a little below the base of the lower jaw, and the posterior one nearly as low as the base of the jaw. From the inferior extremities of these two vertical incisions, curved incisions, with their concavities looking backward and upward, were made to the extent of five centimetres, including between them a peduncle of skin and subjacent tissues for the nourishment of the extensive flap. The flap was then drawn up and secured by sutures so as to fill up the whole space left vacant by the removal of the disease. The wound healed throughout, leaving the patient but slightly disfigured.

The second case was one of absence of the upper lip and of the columna nasi, as well as of a portion of the right ala nasi, occasioned by the application of a caustic paste for the removal of a supposed cancer of the upper lip. The patient was a man 65 years of age. Dr. Post operated on the 1st of May, 1880. He commenced by separating from the cheek a small remnant of the upper lip, which remained at the left extremity, and reversing it so as to form a columna for the nose. He then made two horizontal flaps from the cheeks with peduncles carved downward and forward, and united them by means of pins and sutures, so as to reconstruct the upper lip. A number of supplementary operations were required, and the result was a marked improvement in the appearance of the patient.

Water-color drawings were exhibited, showing the conditions of these two patients before and after the operations, which showed the benefit and added much to the interest of the paper.

Dr. D. H. Goodwillie, of New York City, read a paper on "Treatment of Arthritis of the Temporo-Maxillary Articulation," in which

he reported cases treated. The causes of arthritis are local and constitutional. Whenever it occurs, the motion of the jaws becomes impaired according to the cause, severity, and length of the disease, and they often require long treatment in order to restore the muscles to their normal condition.

The treatment is by means of apparatus to relieve the joint of pressure on the inflamed articular surfaces. It is made as follows. An impression of the teeth of the entire jaw is taken, and an interdental splint made, the posterior part of which is thickened a little, for the purpose of a fulcrum.

Another impression is taken of the chin, and a rubber splint is made to fit it. A skull-cap is next made to fit the head closely, with elastic bands on each side passing down from it and fastened to the chin-splint.

The interdental splint is placed in position in the mouth, and the back teeth of the jaw closed on the fulcrum of the interdental splint; then, when pressure is made on the chin by tightening the elastic bands connecting the skull-cap with the chin-splint, the joint is relieved from pressure.

Dr. Moore, of Rochester, called attention to cases where cicatricial bands caused the trouble,—division of which usually cured them.

Dr. S. D. Gross, of Philadelphia, had seen comparatively few such cases since the abuse of calomel has ceased. He had not been able to accomplish much with wedges. Alluding to section of the bone, he said he had several times performed the operation.

Dr. Hunter McGuire, of Richmond, Virginia, said that one of the cases alluded to by Dr. Goodwillie afterwards fell into his hands. The case was not cured. There was no motion whatever. Dr. McGuire took out a wedge-shaped piece of bone just at the angle, and the result was good. He also spoke of a case of eleven years' standing, where a bridge of bone passed from the upper to the lower jaw, treated in a similar manner by excision of the bridge of bone.

Dr. L. A. Sayre exhibited the mode of applying a plaster jacket to a case of lateral curvature.

On motion of Prof. Gross, a vote of thanks was passed to Dr. Sayre. In discussing the method, Dr. Hodgen, of St. Louis, criticised the jury-mast, and said that it affected the growth of the jaw, which Dr. Sayre said he had never observed. Dr. Hutchison, of New York, spoke in favor of his method of treatment of hip-disease over that by the wire breeches.

The Chair appointed Drs. Kinloch, of South Carolina, Pratt, of St. Louis, and Burgett, of New York, as members of the Prize Award Committee.

SECTION III.—*Obstetrics and Diseases of Women.* Dr. J. R. Chadwick, Boston, Chairman; Dr. J. T. Johnson, D.C., Secretary.

A prolonged discussion was held upon the nature of the investment of uterine fibroids. Dr. H. P. C. Wilson, of Baltimore, then exhibited his uterine dilator and other instruments, which gave an opportunity for a protest from several members against instrumental interference with the uterus upon too slight grounds, betraying a reaction against the common resort to dangerous procedures upon trivial excuses.

Dr. H. O. Marcy exhibited his double drainage and injection tubes, by invitation from the Chair.

SECTION IV.—*On State Medicine*, etc. Dr. J. S. Billings, Chairman; Dr. R. J. Jennings, Secretary.

Prof. J. L. Cabell read a paper on "The National Board of Health and the International Sanitary Conference of 1881." After a historical sketch of the labors of the National Board of Health and of the conference which met in Washington last January, Dr. Cabell concluded as follows:

"There is, therefore, good reason for hoping that an international agreement may be arrived at between the States most frequently threatened with epidemic invasions. Aside from this, the degree of attention which, as a result of the deliberations of the conference, has been given to the subject of maritime sanitary police, cannot be without fruit in securing greater cleanliness, better ventilation of ships sailing on the high seas, and, in general, an improved sanitary condition of these important instruments of commerce, which become so often the carriers of the most deadly contagion, from the failure to use such precautions as sanitary science suggests, and as it is hoped will now be enforced among the maritime powers of the world."

Dr. C. F. Folsom, of Boston, read a paper on "The Relation of the State to the Insane," in which he compared the present methods of the treatment of the insane with those formerly in vogue. He also gave valuable statistical information as to the number of insane in various sections of the country; and he argued in favor of the establishment of State Lunacy Boards. Among the points made were, first, a Lunacy Board should embrace men with a thorough knowledge of insanity and its treatment. The chief duties of this board should be to secure proper care for those unfortunate insane who are kept in private dwellings, where they are very much liable to neglect. Secondly, they should require the commitment of lunatics to the asylum, and otherwise look into the cases, so as to be able to decide whether the lunatics should be retained for care or be discharged.

The paper was in every respect an able and thoughtful one, and full of information.

In discussing the paper, Dr. Grissom made the point that if insanity is treated promptly it is comparatively curable; but the usual custom is to delay action too long. One rea-

son of this is that some people seem to think it disreputable to have it known that they have an insane person in the family. When insanity becomes generally recognized as a purely physical disease and is so treated, a different feeling in regard to it will prevail, and a better prognosis will be afforded.

SECTION V.—*Ophthalmology, Otology, and Laryngology.* Dr. D. S. Reynolds, Kentucky, Chairman; Dr. S. M. Burnett, Washington, Secretary.

Dr. Carl Seiler, of Philadelphia, read a paper on Syphilitic Laryngitis, in which he discussed the diagnosis and treatment. He stated that the affection could be diagnosticated from non-specific inflammation by the peculiar discoloration of the mucous membrane and the symmetrical disposition of the inflammatory patches. There are frequent ulcerations of the larynx, which may be divided into shallow ulcers (in nothing differing from those seen in catarrhal laryngitis), and deep ulcerations, which were, in the author's opinion, due to the breaking down of the smaller or larger gummata in the mucous membrane. He also stated that a diagnostic sign of syphilitic laryngitis was seen in the red lines, and surrounding areola best observed upon the velum palati. He recommended as treatment (besides the systemic, with iodide of potassium and mercury, and supportive, with tonics, etc.), local touching of the shallow ulcers with solid nitrate of silver fused upon an aluminium probe, and the deep ulcers with acid nitrate of mercury (1 to 4), or the galvanic cautery.

In the discussion, Dr. Reynolds said that he thought constitutional treatment would do more good than any local measures. He was surprised at the statement of Dr. Seiler, that the diagnosis of simple from syphilitic laryngitis was difficult. He did not believe that catarrhal inflammation could produce ulceration. There were three kinds of syphilitic ulcers, viz.:

1. The ulcer with inflamed base and everted edges.

2. Ulcer with pale or gray base, with irregular margin and sharply defined scarlet areola.

3. Ulcer wholly unaccompanied with any evidences of inflammation, with sharply-defined outlines, and gummatous deposits surrounding the margin.

He thought that local applications could give no good results, unless restricted to such remedies as would give relief from pain.

The subject was also discussed by Drs. Stephens and Walsh.

Dr. Chisolm, of Baltimore, read a communication on a form of Tinnitus Aurium, due to rhythmical contraction of the tensor tympani, coming on at intervals in the day, resembling the fluttering of the eyelid. Treatment was unsatisfactory. In one case the omission of wine at dinner gave permanent relief.

Dr. Eugene Smith, of Detroit, reported a case of blepharoplasty, in which transplanting of skin was performed (one and a half by two inches was the size of the portion taken from the arm).

Dr. H. Augustus Wilson, of Philadelphia, presented some compressed pellets of atropia for ophthalmic use. One containing one one-hundredth of a grain was sufficient to relax the accommodation in an hour.

Just before adjournment, a paper by Dr. Laurence Turnbull, of Philadelphia, entitled (1) Otitis Intermittens, with Observations upon the Use of Quinine in Diseases of the Ear; (2) On the Importance of Ear Examinations in Effecting Life Insurance, was, on motion, read by title, and referred to the Committee on Publication.

SECTION VI.—*Diseases of Children.* Dr. A. Jacobi, New York, Chairman; Dr. T. M. Rotch, Boston, Secretary.

Dr. Jacobi made some introductory remarks upon eczema in infants, and advocated the use of restraint to prevent scratching. No water should be used, except in very rare contingencies. Scabs should be removed by alkaline lotions or Hebra's soap, to be followed by astringents, such as zinc ointment or diachylon. Attention to diet is of great importance, and often the children thrive better on artificial food than on breast-milk.

Dr. Jacobi, in the absence of Dr. R. J. Nunn, of Savannah, read a paper for him on the Treatment of Diphtheria. The disease had raged in Savannah with very fatal effects, and a letter from a friend elsewhere said that, after treating six hundred or seven hundred cases, his faith in the efficacy of drugs was very feeble. The causative influences are probably not the same in all cases. Medicines which cure the disease in Germany fail in this country; and the discussions as to the identity of croup, diphtheria, and scarlet fever are strong arguments in favor of this belief, and all treatment based upon one cause must fail to relieve all cases. Dr. Nunn quoted Dr. Jacobi as saying, "The entrance of the diphtheritic poison into the system is not the same in all cases. There are cases in which the origin of the disease is decidedly local. There are others in which the poisoning of the blood through inhalation is the first step in the development of the disease." A powder highly recommended and used is as follows:

℞ Sulphur. sub., gr. xlviij;
Acid. tannic., gr. xij;
Acid. salicylic., gr. i;
Pulv. potass. chlor., gr. xij. M.

Precaution must be used in compounding this prescription. A little of this powder is put on the back of the tongue every hour or two, and a small piece of ice given afterwards. It will be seen that this prescription is a combination of antiseptics principally.

In another case the following formula was used with good effect:

℞ Sulphur., gr. vij;
Acid. boracic., gr. iv;
Acid. tannic., gr. j;
Acid. salicylic., gr. j;
Resorcin., gr. j. M.

Another formula is:

℞ Sulphur. sub., gr. viij;
Acid. boracic., gr. iv;
Acid. benzoic., gr. j;
Acid. salicylic., gr. j;
Acid. tannic., gr. j;
Acid. tartaric., gr. iv;
Sodii chlorid., gr. iv;
Resorcin., gr. j. M.

Dr. Lathrop, of New Hampshire, said that he had experimented with chloroform largely, and finds it a highly useful agent. He uses it in diphtheria and other throat-affections, applied on a piece of cotton attached to a tube or pen-holder. The patients usually required visiting no longer than four days; but the cases were not so malignant as had been reported in other localities.

No unpleasant effects have ever followed this plan of treatment, and the child, in true diphtheria, does not complain of *smarting* from the application of chloroform. He had used this plan of treatment in one hundred cases. Of course constitutional measures are added.

Dr. William Lee, of Baltimore, has used equal parts of tinct. ferri chlorid. and ol. ricini with benefit. He considers the disease as local at first, and then constitutional. A physician from his county had used large doses of ol. copaibæ with benefit, followed by emetics to remove the membrane.

Dr. G. Vivian, of Minnesota, has used in severe epidemics alcohol as an inhalation, and has employed as much as a quart of alcohol a day. He has never seen any constitutional effects ensue.

Dr. J. McNeal, of Gettysburg, Pa., recommends the following: Potass. bromid., ʒj; potass. chlorat., ʒij; acid. carbolic., gr. xx; aquæ, Oj. Use in an inhaler. Locally, chloroformi, ʒij; lin. saponis, ʒj–ʒij.

Dr. F. E. Hitchcock, of Rockland, Maine, uses equal parts of sulphurous acid and water in an atomizer. The proportions can be varied, and the acid used as a gargle, with cold affusion externally.

Dr. Jacobi, in answer to an inquiry concerning the benefit of pilocarpin, said that his opinion of it was unfavorable. It was proposed as a specific by a Dr. Guttmann; and, while on this subject, he would state that this gentleman was not Dr. Guttmann, of Berlin. His article on pilocarpin had struck him as nothing more than an advertising arrangement. In diphtheria there are two forms, one in which the deposit can be readily separated from the mucous surface beneath, and one in which the deposit is deeply imbedded in the lower structures. In the latter form Dr. Jacobi believes that pilocarpin does harm, and in one case he thinks that death was hastened by using this drug. Pilocarpin debilitates the heart's action, often giving rise to nausea and vomiting. The milder cases of diphtheria recover, as a rule, if left alone; and in all cases of the disease he thinks the utility of pilocarpin doubtful. The paper in which pilocarpin was recommended as a specific is not satisfactory as regards the description of the cases treated. If the remedy be used at all, a fluid extract is the best preparation, as the muriate of pilocarpin is decomposed in the stomach. His opinion also of the effect of lime was not so high as that of many writers.

Dr. E. H. Bradford presented a paper entitled "Resection of the Tarsus in Severe Cases of Club-Foot." The first case was that of a girl eleven years old, with severe equino-varus, the axis of the foot being at right angles with that of the leg. Tenotomy and mechanical treatment were tried for a month, with but slight benefit. Dr. Bradford removed a wedge-shaped section of bone from the tarsus with a metacarpal saw, and with antiseptic precautions. There were no constitutional symptoms after the operation (except that the temperature rose once to 101°, being otherwise normal during the recovery), and in five weeks the patient was able to walk without a cane. The second case was one of a boy thirteen years old, with club-foot, in which an equally good result was obtained after operation.

THIRD DAY'S PROCEEDINGS.

After the announcement of the names of additional delegates, Dr. Hunter S. McGuire, of Virginia, as chairman of the Section on Surgery, read an address upon "Operative Interference in Gunshot Wounds of the Peritoneum," urging surgical interference, free drainage, etc.

Dr. John S. Billings, by vote of the Section on State Medicine, read the paper presented yesterday to the Section, "On Some of the Results of the Tenth Census, as regards Mortality Statistics."

Dr. N. S. Davis submitted a report on "Clinical Observations and Records." The report was accompanied by a recommendation that a committee of five be appointed by the President of the Association, to be called the Standing Committee on Atmospheric Conditions and their Relation to the Prevalence of Diseases; also suggesting how the committee shall be appointed, etc., and that five hundred dollars be appropriated for expenses. The recommendations were adopted.

OFFICERS FOR 1881.

Upon a question of privilege, Dr. Sayre, of New York, requested that the minutes of the session of 1877 be so amended as to contain his protest against a resolution adopted in the Surgical Section in regard to shortening after

fracture of long bones, which, he explained, was sent to the secretary of the Association, and not to a Chicago newspaper, as had been publicly asserted. The amendment was ordered to be made, in accordance with the explanation.

Dr. Stone submitted the report of the Committee on Nominations, as follows: For President, J. J. Woodward, U. S. A., of Washington; First Vice-President, I. P. O. Hooper, of Arkansas; Second Vice-President, Leartus Conner, of Michigan; Third Vice-President, Eugene Grissom, of North Carolina; Fourth Vice-President, Hunter McGuire, of Richmond; Secretary, William B. Atkinson, of Pennsylvania; Treasurer, R. J. Dunglison, of Pennsylvania; Librarian, William Lee, of Washington, D.C.; Chairman of the Committee on Arrangements, Dr. Stone.

Vacancies in the Judicial Council were filled by the appointment of Dr. S. N. Benham, of Pennsylvania; Dr. J. M. Jones, of the District of Columbia; D. A. Linthicum, of Arkansas; William Brodie, of Michigan; H. D. Hollon, of Vermont; A. B. Sloan, of Missouri; and R. Beverly Cole, of California.

St. Paul, Minnesota, was selected as the next place of meeting.

On motion of Prof. Gross, the rules were suspended. He then offered a resolution to establish a Section on Dentistry, which, as an amendment, was duly laid over until next meeting.

The amendment to the Code of Ethics was then again taken up for discussion: "and hence it is considered derogatory to the interests of the public and honor of the profession for any physician or teacher to aid in any way the medical teaching or graduation of persons knowing them to be supporters and intended practitioners of some irregular and exclusive system of medicine."

Dr. Davis made an earnest speech in support of the amendment. He was followed by Dr. M. P. Martin, of Massachusetts, also in support of the amendment.

A motion to lay the subject on the table was lost,—ayes 106, noes 108. The matter was again postponed, and made the special order for the next morning, immediately after the meeting of the Association.

The following amendment to the by-laws, offered by Dr. J. M. Keller, of Arkansas, then came up and was adopted:

"In the election of officers and appointment of committees of this Association by the President, he shall be confined to members in actual attendance, except in the Committee on Arrangements."

PROCEEDINGS IN THE SECTIONS.

SECTION I.—*Practice of Medicine.* Dr. L. D. Bulkley finished his paper on the Diet and Hygiene of Eczema, which he regarded as of great importance in treatment.

Dr. Whitaker, of Cincinnati, read a communication on the Treatment of Diphtheria, in which he recommended the use of antiseptics, such as quinine, salicylic acid, and the benzoates, and the local application of the officinal solution of the subsulphate of iron.

Dr. J. A. Octerlony presented a paper on the Treatment of Dysentery, which was referred.

Dr. I. E. Atkinson read a paper on "The Production of Albuminuria by the Use of Iodide of Potassium in Syphilitic Disease," which led to an interesting discussion.

Dr. H. Augustus Wilson showed his hypodermic pellets.

Dr. Henry A. Martin read a paper on Variola Vaccina and Variola Equinæ in Massachusetts, in which he reported a true case of spontaneous *variola equinæ*.

In conclusion, he moved that this Section recommend to the Association that a committee be appointed to visit these various farms and investigate the whole subject of bovine virus. Carried.

"The Materia Medica of the Future" was the title of a paper read by Dr. T. E. Stewart, of New York, and referred.

The following resolution, offered by Dr. Dunster, was adopted:

"*Resolved*, That the spirit of the Code of Ethics forbids a physician from prescribing a remedy controlled by a patent, copyright, or trade-mark. This, however, shall except a patent upon a process of manufacture or machinery, provided said patent be not used to prevent legitimate competition; and shall also except use of a trade-mark used to designate a brand of manufacture; provided that the article so marked be accompanied by working formulæ, duly sworn to, and also by a technical, scientific name under which any one can compete in the manufacture of the same."

Dr. Upshur, of Richmond, Virginia, read the report of a case of paralysis of motion of both upper extremities, in which the prominent symptoms were complete paralysis of motion of both upper extremities *except in the hands*, intense pain in the shoulders on any attempt to lie down, and inability to sleep. The attack was ushered in by convulsions epileptic in character.

SECTION II.—*Surgery and Anatomy.* Dr. Hunter McGuire, Chairman; Dr. Duncan Eve, Secretary.

Dr. B. A. Watson, of Jersey City, read an essay entitled "An Experimental and Clinical Inquiry into the Etiology and Distinctive Peculiarities of Traumatic Fever." After a historical résumé, he proceeded to define "traumatic fever," which he regarded as a term often used improperly for "septic fever." Modern investigations lead us to admit the existence of two varieties of fever after wounds, a septic and a non-septic variety. In a series of physiological experiments upon rabbits, in which he succeeded in lowering the temperature by injections of ether, chloroform, or car-

bolic acid, in most cases absorption of the fluid and swelling took place without a rise of temperature; in the exceptional case abscess with septic poisoning, and death, resulted. After these careful experiments, the writer is convinced that the fever was not due to the lesion, and raised the question as to whether or not it is due to the absorption of carbolic acid. The carefully-made experiments of Edelberg apparently demonstrated that the traumal fever noticed in connection with the antiseptic treatment should be attributed to the partly congealed and partly fluid blood rather than to the carbolic acid. After reviewing the question thoroughly, Dr. Watson is confident that primary "antiseptic" fever is due to carbolic acid acting on the wound-secretion, aided by the air; whilst absorption always precedes true septic phenomena.

The paper was discussed by Drs. Campbell, Nancrede, Post, Quimby, and others.

Dr. Charles A. Leale read a paper on "Malignant Pustule, or Labial Carbuncle," for which he advocated free incisions and thorough cauterizing the cut surfaces with nitric acid, subsequently treating it as an open wound with balsam of Peru.

On motion, a committee of three was appointed to select six subjects for discussion in the Section on Surgery at the next session of the Association.

SECTION III.—*Obstetrics and Diseases of Women.* The Chair announced the following committees:

Committee for Selection of Subject of Essay.—Prof. E. S. Dunster, Michigan; Prof. G. M. B. Maughs, St. Louis; Dr. H. M. Field, Boston.

Committee of Award.—Dr. Robert Battey, Georgia; Dr. Albert H. Smith, Philadelphia, Pa.; Dr. P. F. Mundé, New York City.

Committee to which Papers for Publication were Referred.—Dr. Joseph Tabor Johnson, Washington, D.C.; Dr. John Byrne, Brooklyn, N.Y.; Dr. H. P. C. Wilson, Baltimore, Md.

Dr. Joseph Tabor Johnson read a clinical inquiry entitled "Can we make a positive diagnosis of pregnancy previous to the occurrence of the audible sounds of the fœtal heart and the detection of the fœtal movements?" After citing the presumptive evidences of pregnancy, he concluded that the increased temperature of the vagina afforded a means of positive diagnosis of early pregnancy.

The paper was generally discussed.

Dr. Robt. Battey, of Georgia, was surprised that no gentleman had mentioned any of the following aphorisms in doubtful cases:

1st. Always consider a married woman pregnant if living with her husband until *proved* otherwise.

2d. Always consider an unmarried woman innocent till *proved* guilty.

3d. Always believe that a woman married, of the highest character, living with a husband of equally high character, both solemnly assuring the medical man that no intercourse has taken place for two years, as she has been bedridden for that length of time, may bring forth a dead fœtus.

4th. Always believe a young unmarried woman with abdominal tumor, of high social position and unimpeachable virtue, if she has been watched over by a platonic and abstemious young cousin of the male persuasion while the mother went out—to be pregnant.

Dr. P. F. Mundé, of New York, exhibited some instruments of original device, after which a discussion was entered into upon the subject of the management of the third stage of labor.

SECTION IV.—*Medical Jurisprudence and State Medicine.*

No papers were read before this Section; two were referred by title to the Publication Committee,—on "Cellars," by Dr. A. N. Bell, of Garden City, and on the "Necessity and Means of Removing Putrescible Matters from Inhabited Places," by Dr. W. Wright, of Milwaukee.

SECTION V.—*Ophthalmology, Otology, and Laryngology.*

The afternoon was devoted to the discussion of Astigmatism, by Drs. Reynolds, Risley, Burnett, Scott, and Daly.

A paper presented by the Chairman on the treatment of nasal polypi was read by title and referred.

SECTION VI.—*Diseases of Children.*

Dr. Blake, of Massachusetts, presented a paper on "Middle-Ear Disease in Children in the Course of the Acute Exanthemata."

Dr. Jacobi presented his address as chairman of the Section, in which special attention was given to the exanthemata. Rubeola (German measles) he considered fully entitled to a position among the contagious constitutional affections. In diphtheria he protested against the use of large doses of chlorate of potassium, as being dangerous, many fatal cases being on record. The paper was followed by general discussion.

Dr. Rotch, of Boston, said that, in order that there should be no confusion of terms, it should be first stated that there was a true measles and a rubeola (the rötheln of the German writers), as stated by Dr. Jacobi, and that so far as the eruption was concerned it was often impossible to make a distinction; secondly, that roseola, which was usually a papular eczema, had nothing to do with the other diseases, and that in the great majority of cases the eruption caused by eating crabs was that of urticaria, which of course was easily distinguished from the eruption of measles; thirdly, that he would again state that undoubted cases of true rubeola had been observed in Boston, where the disease is well recognized and differentiated from measles.

FOURTH DAY'S PROCEEDINGS.

The President announced the following Committee on Clinical Observations and Records: Drs. N. S. Davis, Chicago; J. M. Toner, D.C.; H. A. Marcy, Boston; W. H. Giddings, N.C.; S. M. Bemis, New Orleans.

THE ETHICAL AMENDMENT.

Dr. Billings, U.S.A., of Washington, submitted the following as a substitute for the amendment to the Code of Ethics which was under discussion yesterday: "It is not in accordance with the interests of the public, or the honor of the profession, that any physician or medical teacher should examine, or sign diplomas or certificates of proficiency for, or otherwise be specially concerned with the graduation of, persons who they have good reason to believe intend to support and practise any exclusive and irregular system of medicine."

Dr. Billings, in offering the paper, said, "This amendment has been prepared after consultation with the representatives of the various views which have been presented here, and it is believed to embody the prevailing opinion of the Association. It places no restriction upon teaching or upon the diffusion of knowledge, while it affirms the principle that we will not endorse in any way or recommend to the public men who limit their practice to one special dogma, or who deliberately class themselves with the vilifiers of and sneerers at regular medicine for the sake of notoriety."

The substitute, under the call of the previous question, was adopted.

The Committee on Nominations made their final report, naming the presidents and secretaries of the various Sections.

ABUSE OF MEDICAL CHARITIES.

The committee to which was referred the communication from the Philadelphia County Medical Society in reference to the abuse of medical charities reported the proposed plan of co-operation between the medical charities and Philadelphia Society for Organizing Charities to be admirably adapted, if faithfully carried out, to remedy the evil at which it is aimed, and which has reached such colossal proportions in that as in every large city both in this country and in Great Britain. As Philadelphia is exceptionally favored in having its systems of charity so admirably methodized and co-ordinated, your committee would suggest that in other cities not possessed of this machinery a concerted action of all the medical charities, in combination with the police authorities, in the matter of the visitation and registration of the dependent classes, might be attended with valuable results. The report concluded with the following resolution:

"*Resolved*, That the secretary be instructed to convey to the officers of the Philadelphia County Medical Society the acknowledgment of the indebtedness of this Association to the Society for thus bringing to our notice its action in a matter so nearly concerning the dignity of the profession and the welfare of the public."

The resolution offered yesterday by Dr. E. Dunster in the Section on Practice, relating to patent medicines, was referred to the Judicial Council.

The report of the treasurer showed a balance of two thousand and eight dollars and forty-six cents in his hands.

The librarian, Dr. Lee, presented an interesting report, and asked that two hundred dollars be appropriated for binding and purchase of books, and that the treasurer be authorized to subscribe fifty dollars to the *Index Medicus*, both of which were adopted.

On motion, one thousand dollars were appropriated from the treasury for the permanent secretary for his services during last year.

REPORT OF NOMINATING COMMITTEE.

The Committee on Nominations reported the following additional officers, who were elected:

I. *Section on Practice of Medicine.*—Chairman, Dr. J. A. Octerlony, Kentucky; Secretary, Dr. Deering J. Roberts, Tennessee.

II. *Section on Surgery and Anatomy.*—Chairman, Dr. J. C. Hughes, Iowa; Secretary, Dr. William A. Byrd, Illinois.

III. *Section on Obstetrics.*—Chairman, Dr. H. O. Marcy, Massachusetts; Secretary, Dr. C. V. Mottram, Kansas.

IV. *Section on Medical Jurisprudence and State Medicine.*—Chairman, Dr. A. L. Gihon, Washington, D.C.; Secretary, Dr. J. H. Sears, Texas.

V. *Ophthalmology, Otology, and Laryngology.*—Chairman, Dr. D. B. St. John Roosa, New York; Secretary, Dr. J. Solis Cohen, Philadelphia, Pa.

VI. *Diseases of Children.*—Chairman, Dr. S. C. Busey, Washington, D.C.; Secretary, Dr. William Lee, Baltimore, Md.

VII. *Dentistry.*—Chairman, Dr. D. H. Goodwillie, New York; Secretary, Dr. P. W. Brophy, Illinois.

Judicial Council: Drs. S. N. Benham, Pennsylvania; J. M. Toner, Washington, D.C.; D. A. Linthicum, Arkansas; William Brodie, Michigan; H. S. Holton, Vermont; A. B. Sloan, Missouri; R. Beverly Cole, California.

Dr. D. S. Reynolds, of Kentucky, delivered the address of the Chairman of the Section on Ophthalmology, etc., which was appropriately referred. The reports of the committees on Necrology and secretaries of Sections were also presented. The report of the Section on State Medicine, containing a resolution offered by Dr. Martin, of Boston, recommending investigation of the vaccine farms and the methods of propagating bovine virus, was adopted, and a committee of three ap-

pointed for the purpose, and one hundred dollars appropriated for expenses.

Dr. William M. Beech, of Ohio, chairman, submitted the report of the committee appointed on social position of members of the medical staff of the army and navy, in which he asked that the committee be continued. In doing so, he argued that the principle of promotion which prevails among army officers and in the other departments of the government should be extended to the medical staff.

On motion of Dr. Davis, the matter was laid on the table.

RESOLUTION OF THANKS.

The Convention passed a resolution of thanks to the Committee of Arrangements of this Association, for the faithful attention they have given to their duties and requirements; to the medical profession and citizens of Richmond, for their hospitality and endeavors to make the meeting pleasant and agreeable; to Drs. McCaw and McGuire, for the elegant special entertainment given by them at the Westmoreland Club; to Mr. McClure, superintendent of the Telephone Company, for special facilities given the Committee of Arrangements and the Association; to Vice-President Parsons, of the Richmond & Alleghany Railroad, to Mr. Powell, manager of the Richmond Theatre, and to others, who had contributed to the pleasure and comfort of the members.

President Hodgen, in a short speech, then declared the Association adjourned.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

AT a conversational meeting of the Society, held at the Hall of the College of Physicians, Philadelphia, February 23, 1881, Dr. Albert H. Smith, President of the Society, in the chair, Dr. E. T. Bruen read a paper entitled "Clinical Notes Relative to Physical Diagnosis" (see p. 513).

DISCUSSION.

Dr. F. P. Henry remarked that the fact of Dr. Bruen having reported in succession cases of pleurisy with effusion and thoracic aneurism very naturally recalled to his mind a case illustrating that form of disease that is most apt to be mistaken for thoracic aneurism. He referred to pulsating empyema. The affection is an extremely rare one. Dr. Henry had met with but one case, and in medical literature had found recorded, with full details, but three others. These three were reported by Mr. MacDonnell in the *Dublin Journal of Medical Science* for March 1, 1844, and the term "pulsating empyema," as applied to cases of empyema attended with one or more circumscribed, strongly-pulsating tumors, was there first employed.

In Dr. Henry's case there were three strongly-pulsating tumors,—one in the left mammary region, about the size of half a large orange; a second, much smaller, and more acuminated in shape, in the left antero-lateral region; and a third, the largest of the three, in the left postero-inferior region, its long diameter, about four inches, corresponding with that of the vertebral column. All three of these tumors possessed a strong, systolic, expansile pulsation. The patient was a female, aged about 30, who was admitted to the Episcopal Hospital by Dr. Henry in the spring of 1880. The day after admission, pus was withdrawn from the smallest tumor by a hypodermic syringe. The next day, aspiration was performed, and some time after, a drainage-tube was inserted by Dr. John Ashhurst. The woman is still alive, and an inmate of the Hospital. Further details are now withheld, as the notes of the case will probably soon be published in full. The object of this premature and imperfect announcement with regard to it, apart from its manifest bearing upon the subject of Dr. Bruen's paper, is to inquire whether members of the Society have met with any similar cases.

Dr. H. Y. Evans said that a careful study of the sphygmographic tracings in aneurismal cases would throw light on the question of the contents of the sac: if nearly solid it would not give as abrupt a decline as where the contents are fluid.

Dr. J. T. Eskridge said that an Italian physician had declared that in purulent collection in the chest the vocal fremitus is entirely obliterated, but in serous effusion it is not absolutely lost. Dr. Da Costa had, in a certain case, based a diagnosis of empyema upon the entire absence of vocal fremitus. The vocal fremitus over the upper part of the chest is at the same time increased by the condensation and congestion of the lung, except where pulmonary emphysema coexists. He had never seen the Corrigan pulse except in cases of aortic regurgitation, though, if it did occur, there need be no fear of a mistake in diagnosis. In such cases, there is enormously-hypertrophied left ventricle; this hypertrophy does not occur in aneurism. Another point of distinction is the absence of retinal pulsation.

Dr. E. T. Bruen referred to a case of pulsating empyema where the observation was made that the pulsation was not transmitted from the heart; there was not the heaving pulsation of aneurism; but a needle introduced between the ribs only brought out blood and pus; this was repeated several times. This illustrates the difficulty of diagnosis. The statement that the transmitted pulsation in empyema is not so expansile as over an aneurism, he considered well founded, but recognized an especial difficulty in some cases of deciding the question after the acute symptoms have passed away.

With regard to vocal fremitus, he had seen cases of empyema in which it was preserved.

With regard to the sphygmograph, he had tried several kinds without complete satisfaction. Pond's is especially bad, because the weight on the end of the lever drags the needle backward so as to exaggerate the dicrotism. Marey's instrument yields better results.

The object of presenting this paper was to insist upon a systematic method of study of clinical cases: where a mistake is made, it is generally because the case has not been carefully studied, the diagnosis having been made from isolated symptoms.

On motion, the thanks of the Society were tendered Dr. Bruen for his interesting paper.

DISCUSSION UPON RÖTHELN.

Dr. Laurence Turnbull had recently seen a case very much like measles, but without catarrhal symptoms, which he thought must be German measles, or rötheln. It began with a slight rigor and fever, which was followed by enlarged glands over the mastoid region and in the neck, and by an eruption beginning upon the face and spreading rapidly over the whole body. The rash was not crescentic, and there was no marked elevation; it had an itching sensation, like a second vaccination. The eruption more resembled that of scarlet fever than measles.

Dr. Wittig said that the disease was not new, as he had seen it thirty years ago. Some cases show more effect upon the mucous membranes, others more upon the general surface; some have the inflammation of the conjunctiva like measles, others behave more like scarlatina. The kidneys are sometimes affected. Ordinarily, the disorder is not serious, and requires but little medication. Diluents, nitre, spirits of Mindererus, in some; in others, acidulated drinks are better, such as mineral acids.

Dr. O'Hara noticed a great difficulty in diagnosis in some cases. One case appeared the first day like one of malignant smallpox, on the second like scarlet fever, and on the third like measles. He subsequently concluded that it was German measles. In five or six days the attack had passed away.

The disease has a faint resemblance to smallpox. In only one case out of sixty had he noticed a resemblance to measles.

Dr. W. B. Atkinson based his diagnosis upon the rapidity with which the eruption spreads over the entire body. In six or eight hours the surface is covered, and it disappears just as rapidly. It requires very little treatment.

Dr. W. R. D. Blackwood had seen a great deal of measles, and had been able to distinguish this disease from it in only one case. The eruption spread rapidly, pulmonary symptoms were light, no coryza; but the child was extremely sick for a few days. There was considerable glandular enlargement in the axilla and groin, but especially in the post-cervical glands. Recovery took place in a few days.

Dr. E. T. Bruen mentioned a case where a child had measles, and, a year afterwards, had the typical eruption apparently, but without coryza or inflammation of the lungs. The eruption came out precisely the same in appearance, but the child did not seem very sick, and the disorder ran a mild course, desquamation occurring in ten days. This second attack he considered rötheln.

Dr. H. H. Smith asked if the disease is not called by the older writers *rubeola sine catarrho*.

Dr. Wittig said that it probably was. The name rötheln merely means that it is like roseola.

Dr. William M. Welch said that a great many cases of this character are received at the Municipal Hospital, being mistaken for smallpox. The disorder appeared to him to be very much like measles, but without the coryza. The eruption continues for several days, during which period the patients do not seem very sick. He had observed, in some cases, a temporary staining of the skin after the eruption had passed off.

REVIEWS AND BOOK NOTICES.

A System of Oral Surgery. By James E. Garretson, M.D. Philadelphia, J. B. Lippincott & Co., 1881.

Whether oral surgery be or be not a legitimate specialty in the eyes of the general surgeon, the appearance of the third edition of this book is evidence that there are practitioners of surgery, of medicine, or of dentistry who feel the need of more detailed instruction upon diseases of the mouth than is to be obtained from works on general surgery. The position of Dr. Garretson, as one who, originally a dentist, has passed from the narrower sphere to the wider outlook of a general surgeon, and has been successful in each career, of course eminently fits him to be the author of a treatise like the present. We think most of those who use Dr. Garretson's book will agree with us rather than with what *seems* to be his own opinion,—namely, that the most valuable part of the book is that which deals with practical points, and that when philosophy comes in, then his thought has some tendency to become metaphysical,—*i.e.*, intangible, and altogether above those lower regions of common sense in which a metaphysician withers as an exotic dies in a Northern winter. Take, as example, his chapter on tumors. Practically, his idea of diagnosing cancer by exclusion is often of value; scientifically, his division of tumors would probably never have been made by any one educated in strict scientific and not metaphysical or practical thinking.

But we are losing sight of the duty of one who notices a new edition of an old book,—namely, to compare it with the previous output. Of this volume we can say that it appears to us, in many ways, superior to its predecessor. It will no doubt enjoy the continued success it deserves, and sustain the reputation of its author.

LECTURES ON THE DISEASES OF THE RECTUM AND THE SURGERY OF THE LOWER BOWEL. Delivered at the Bellevue Hospital Medical College. By W. H. VAN BUREN, M.D., LL.D. Yalen., Professor of the Principles and Practice of Surgery in the Bellevue Hospital Medical College, etc., etc. New York, D. Appleton & Co., 1881.

The volume before us is a second edition of the lectures delivered by the eminent professor in Bellevue College. These lectures are twelve in number, and may be taken as an excellent epitome of our present knowledge of the diseases of the parts in question. The work is full of practical matter, but it owes not a little of its value to the original thought, labor, and suggestions as to the treatment of disease, which always characterize the productions of the pen of Dr. Van Buren.

It is, of course, impossible, within the narrow limits of a book-notice, to do more than allude to the contents of such a book. The first two lectures are devoted to the consideration of pruritus, eczema, and hemorrhoids, internal and external. The general symptoms of the latter complaint are graphically described, and the hygienic and palliative measures which should be resorted to are forcibly laid down. The use of nitric acid as a palliative remedy is restricted to hemorrhoids occurring in young full-blooded subjects, where there is a tendency to hemorrhage, and where the protruding surfaces are red, vascular, velvety, and limited in extent. The different processes for the radical cure of internal hemorrhoids are carefully considered by the author, who tells us that he has tried all of the measures employed to destroy these tumors, and can "confidently recommend to you strangulation by the ligature as the safest, surest, and most manageable procedure." The écraseur he objects to as being tedious, and as being sometimes followed by bleeding.

In performing the operation of ligation of hemorrhoids Dr. Van Buren differs somewhat from the practice of surgeons generally. He is not content with simply ligating the tumors, but insists strongly on thorough dilatation of the sphincter ani muscle at the commencement of the operation, by which process the interior of the lower portion of the rectum is placed entirely at his disposition. This stretching of the muscle, he tells us, saves much pain and trouble to the patient after the operation, for the muscle will not recover from its condition for a week, during which time the patient escapes pinching and pressure of the tender parts. There is probably, also, less tendency to retention of urine, which is often so annoying an accompaniment of operations for hemorrhoids. Dr. Van Buren states that he has employed this process of preliminary dilatation for the last twenty years, and "can say truly that I have never seen any permanent injury to the sphincter, nor, indeed, any inconvenience whatever, follow its use;" and he adds that he cannot help thinking that those who speak unfavorably of this measure may not have fully tried it. Dr. Van Buren speaks positively as to the danger of ligation of hemorrhoids in selected cases, and says that it is so trifling as scarcely to be appreciated. He has never had an unpleasant result, but he refers to one fatal case of Dr. Mott's and to one other fatal case. In both instances the death was from pyæmia.

The lecture upon prolapsus ani forms one of the most instructive and valuable chapters in the book. This affection the author divides into two varieties,—the complete and the incomplete. In the former the mucous membrane alone of the rectum descends; in the latter the muscular and serous coats of the bowel, and even other viscera, may also be included. This division corresponds with that of the late French authorities,—prolapse of the mucous membrane alone and prolapse with invagination, the latter containing all the coats of the gut. Dr. Van Buren also further subdivides complete prolapse into three varieties,—viz., the first, or most common form, in which there is no sulcus at the base of the tumor; the second variety, in which there is a sulcus; and the third form, in which invagination has occurred at some point higher up, and distant from the anus. The radical cure in a general way is to be brought about by setting up a process of repair and causing enough plastic exudation into the meshes of the loose submucous tissue of the rectum and anus to glue it fast to the subjacent muscular coat and sphincter, and to hold it there. This the author believes can best be effected by the actual cautery, especially by the use of the thermo-cautery of Paquelin, the instrument being applied in longitudinal and vertical stripes so as to prevent circumferential stricture.

We would like to follow the author through the chapters devoted to the study of abscess, fistula in ano, and fissure of the anus, but our limited space forbids. As to the propriety of the operation for fistula in phthisical patients, Dr. Van Buren says, "I would advise an attempt to cure a patient with physical signs of phthisis, provided there were no positively advancing softening or severe cough, because, in addition to stopping a waste, it would remove an impediment to exercise in the open air, possibly on horseback;" and in this opinion he believes that most practical surgeons concur.

The chapters on ulcer and stricture, and

on tumors and cancer of the rectum, and its general hygiene, are full of interest, and their perusal will well repay even the most busy practitioner.

The book as it stands in its new form is, indeed, a contribution alike worthy of its distinguished writer and creditable to American surgery.

CONTRIBUTION À L'ÉTUDE DU MÉCANISME ET DU TRAITEMENT DE L'HÉMORRHAGIE LIÉE À L'INSERTION VICIEUSE DU PLACENTA. Par DR. PAUL BITOT.

A CONTRIBUTION TO THE STUDY OF THE CAUSES AND TREATMENT OF HEMORRHAGE DUE TO AN ABNORMAL INSERTION OF THE PLACENTA. By DR. PAUL BITOT.

This valuable monogram of one hundred and seventy-eight pages is divided by the author into two parts, the first (containing fifty pages) being devoted to the causes, and the second (containing one hundred and twenty-eight pages) to the treatment, of the hemorrhage occurring in placenta prævia. Considerable space is given to the definition of abnormal insertion of the placenta. Portal receives credit for having first mentioned the possibility of the placenta being situated near the cervix where hemorrhage occurred without other evident cause; but Schlacher is said to have demonstrated the fact of such an implantation upon the cadaver of a patient dying of hemorrhage.

The author refers to the definition given by Barnes concerning normal and abnormal situation of the placenta, reproducing his diagrams as found in Barnes's "Obstetric Operations" illustrating the so-called fundal, meridional, and cervical zones. He makes three varieties of prævia: *complete*, when the centre of the placenta corresponds more or less exactly to the internal os; *partial*, when the placental edges reach the internal os; and *marginal*, when the placenta is situated in its vicinity.

He discusses the causes of hemorrhage during pregnancy, during labor, and after labor. In this connection he mentions the opinions formerly held with regard to the function of the cervix during pregnancy, and gives the theory of Bandl, which he says was first taught by Prof. Guyon. Special attention is given to the theory of Depaul, that hemorrhage is frequently dependent on irregularities in the development of the uterus; to that of Barnes, that hemorrhage is due, first to excess in rate of growth of placenta over cervix, and secondly to the increased congestion at the menstrual nisus; to that of Gendrin, who finds the cause of hemorrhage in pathological conditions of the placenta; and to that of Matthews Duncan, who believes hemorrhage due simply to the rupture of the utero-placental vessels from various causes.

The second portion of the book discusses the *treatment* of hemorrhage before, during, and after labor. He condemns the use of ergot before labor as advised by Dubois, admits the value of vaginal injections as recommended by Seyfurt, and praises highly the use of the tampon, for the introduction of which very minute directions are given and diagrams inserted to illustrate his method more clearly. He does not admit, however, with Wiegand and Holst, that it is entirely unproductive of local irritation. He considers the tampon when well applied the remedy *par excellence* for hemorrhage before or during labor.

Speaking of it during labor, he says that even should it not entirely check the hemorrhage (which is the exception) it restrains it and prepares the genital organs for labor by producing violent and repeated contractions of the uterus.

The treatment of hemorrhage during labor by rupture of the membranes was instituted, the author says, by Mauriceau, in 1688, and the honor is ascribed to Puzos of having introduced that method into general practice in France, Germany, and England. The indications and the contra-indications for this procedure are given, and a table of twelve cases treated "according to the method of Puzos" shows the recovery of mothers to be eighty-five per cent. and the proportion of children saved to be sixty per cent.

The *accouchement forcè*, the methods of Simpson, Barnes, and Cohen, the perforation of the placenta, the use of the forceps, and the operation of version, are discussed. Eight hundred and sixty cases of version performed for placenta prævia show a maternal mortality of thirty per cent.

The treatment of hemorrhage after labor is briefly considered, and nothing new suggested. The author says, "The administration of ergot during the last period of labor and immediately after delivery, internally (if the patient can tolerate it) or by subcutaneous injections in the form of ergotin, and the application of the tampon in combination with compression upon the uterus through the abdominal walls, constitute the most rational procedure."

A very excellent bibliography of the subject of placenta prævia is appended. G. W. L.

RELAPSE OF TYPHOID FEVER, ESPECIALLY WITH REFERENCE TO THE TEMPERATURE. By J. PEARSON, M.D., B.Sc., F.R.C.P. Lond., Assistant Physician to Charing Cross Hospital, Physician to the Victoria Hospital for Children, etc. With Temperature Charts. 8vo, pp. 144. London, J. & A. Churchill, 1880.

The greater part of the matter of this volume was contributed by its author to the *Medical Times and Gazette*, in a series of papers which appeared during the course of the year 1879. It is fortunate that these papers have been collected and given to the profession in a per-

manent form, for they constitute an important contribution to the knowledge of the natural history of typhoid fever, and mark a very considerable advance in the work of clearing up the obscure subject of typhoid relapse.

Since 1830, when relapses in typhoid fever were first described by Schultz, they have attracted the attention of many observers, but, partly by reason of the intrinsic difficulties of the subject and partly by reason of imperfect methods of study, not including systematic temperature-observations during the period of apyrexia intervening between the primary attack and the relapse, not only the pathology but even the sequence of phenomena going to form the clinical history of relapses of typhoid have continued to be involved in great confusion.

The author, coming to the clinical investigation of the subject from the stand-point of the temperature-changes, by which febrile disorders are to be first studied, has greatly systematized and rendered useful the disconnected facts brought to light by Stewart, Thierfelder, Griesinger, Ebstein, Wunderlich, Maclagan, and Da Costa. Much was previously known of typhoid relapse, as much may be known of the scenery of a play by viewing it from the rear of the stage: the scene can, however, only be appreciated as a harmonious and significant picture by regarding it from the proper point of view and well illuminated. It is thus that the author seeks to present to us his subject, by leading us to view it in the light shed upon it by systematic temperature-studies. His object has been in a great measure attained. That he has not wholly succeeded is due to difficulties in the subject as yet insurmountable,—by no means to faulty methods of work or lack of painstaking.

The first chapter is introductory to the subject, and is devoted to general descriptions of relapses and recrudescences, and an account of the plan of the work,—the *proposition*, in a rhetorical sense.

The second is devoted to single relapses, their temperatures, and their modifications by complications.

In the third chapter are considered irregular and complicated single relapses.

The fourth treats of cases in which two or more relapses recur, with or without complications.

The fifth includes recrudescences, intercurrent attacks, irregular relapses, and conditions likely to be confounded with relapse of typhoid fever.

The sixth chapter has to do with cases of fatal relapse.

The seventh and last is devoted to general conclusions and remarks,—*the peroration*.

I regret that my space in the pages of the *Times* prevents any adequate analysis of these chapters. They are written in a truly scientific spirit, and are of great importance to those who would extend their knowledge of our commonest infectious disease. This book is of more value to the thoughtful practitioner than many volumes of ready-reference-books and formularies of convenient prescriptions.

The reports of cases are made clear by a number of well-printed charts of temperature. Upon the page where stands a brief preface is the announcement of the death of its author at the time his book was ready for publication. To the regret that one capable of such excellent work has so soon ceased from his labors is added a thought of the mystery of life, as we look over the pages of a fellow-worker thus newly "gone over to the majority."

J. C. W.

GLEANINGS FROM EXCHANGES.

CASE OF PROGRESSIVE PAINFUL INFLAMMATION OF ARTERIES.—At a recent meeting of the Clinical Society of London (*Medical Press and Circular*, 1881, p. 315) Mr. John H. Morgan read notes of the following case:

G. W., æt. 46, contracted syphilis at 18, has since married, and has several healthy children. He is subject to a curious congenital enlargement of the superficial veins of the chest and abdomen. Nine years ago he was a patient at Guy's Hospital under Dr. Willis, who has described his case. In 1876 he suffered pain in the left armpit, which passed down to the bend of the elbow and then left him. In 1877 he came under Mr. Morgan's care suffering from pain in the left arm for which there seemed no evident cause. There was no swelling, and he soon recovered from this attack. In 1880 occurred an attack of sudden and severe pain in the right groin, deep-seated, and made intense when the part was pressed. The area of pain was confined to two to three inches in the course of the femoral artery, and to one to two inches on either side of it. This pain gradually travelled down in the course of the artery to the popliteal space, being traceable throughout, and being more severe at the part corresponding with the opening in the adductor magnus. In course of time the pain passed into the leg, and here some limited œdema was seen at the seat of pain, but not beyond. Similar pain came suddenly in the right axilla, and passed gradually down in the course of the brachial artery into the forearm, and here again a limited œdema occurred. He was treated with iodide of potash, alkalies, and biniodide of mercury, at various times and in varying quantities, but without material effect upon the disease. Subsequently the right carotid artery was affected in a similar way; the symptoms pointed evidently to disease of an artery,—probably inflammation of the fibrous coat,—since the pain passed from the centre to the periphery, was in the course of the various arteries, and was made intense

directly the finger perceived the pulsation of the artery beneath it. Mr. Morgan had not been able to find any record of observation of similar symptoms. The patient is now in good health, and has had no recurrence of the symptoms.

FLAT-FOOT IN YOUNG INFANTS.—An editorial article in the *Medical Times and Gazette* (vol. i., 1881, p. 349) quotes from a paper in the *Centralblatt für Chirurgie* by Professor Volkmann. The author alludes to the general belief that the comparatively supinated foot of young infants is converted into the more pronated form of adult age by the weight of the body. If this theory were true, says Volkmann, not only should children who do not learn to stand and walk at the proper time retain the infantile form of foot, but this condition ought to persist in healthy children until the period of standing and walking begins; but this is not the case. Even in the first months of life the foot begins to lose its fœtal form, and may have reached or even passed the normal adult shape before any attempt is made to put it to the ground. And it is also pointed out that in the not uncommon cases where a child, on account of disease or weakness, remains for fifteen or eighteen months without making any efforts at walking, we no longer find the fœtal form of foot remaining. Again, flat-foot may be developed before the end of the eighth or tenth month. Volkmann therefore concludes that body-weight in walking and standing has nothing to do with this change of shape, which depends rather upon hereditary influence. He shows that many changes in shape of bones take place between infantine and adult life, some independent of, some in opposition to, the forces above mentioned. An instance of the latter is the hollowing of the instep, which begins about the time the child begins to walk.

As to the special subject of flat-foot in young children, Volkmann attributes it to four principal causes, as follows. 1. Congenital, depending upon intra-uterine pressure. This form should be treated early and energetically. 2. That form which arises from a too rapid assumption of the adult shape of the foot. Treatment of this variety is invariably unsatisfactory. 3. Rickety flat-foot, which, though undoubtedly, as a rule, caused by the weight of the body, in some cases equally undoubtedly sets in before the child has made any attempt at walking. It seems, therefore, probable that the rickety process itself has an influence in determining the flattening of the plantar arch. 4. Paralytic flat-foot.

CHAULMUGRA OIL.—A recent editorial article in the *British Medical Journal* (vol. i., 1881, p. 475) says that it is most conveniently administered in capsules, but many patients take it well in milk, cod-liver oil, or almond oil. The usual dose is five to fifteen minims. It is best to begin with a small dose, and increase it gradually as the patient becomes accustomed to the medicine. The *perles*, as sold in the shops, contain four minims, and are convenient for use when the dose is to be frequently varied. Chaulmugra oil was first introduced as a specific for leprosy, and Dr. Liveing has published six cases thus treated which were decidedly benefited by its use. The dose given was as high as a drachm thrice daily, together with inunctions of the same in ointment containing twenty grains of the oil to an ounce of lard. In psoriasis, lupus, and obstinate cases of scabies and ringworm it has been used with success. Chaulmugra oil was also introduced as a remedy for phthisis, but the testimony as to its usefulness in this disease is conflicting. In chronic rheumatism and in rheumatic gout it is most useful. Here it is used alone as an embrocation, the after-smell, which is disagreeable, being covered by violet-powder. For neuralgia and sciatica chaulmugra oil is generally mixed with camphor and chloroform, or with an equal weight of a saturated solution of menthol in chloroform, and then rubbed over the painful part. It is found that children, as a rule, take the chaulmugra without difficulty; and its internal administration, combined with inunction, has been employed with benefit in scrofula and in cases of marasmus.

THE TREATMENT OF PNEUMONIC FEVER (ACUTE LOBAR PNEUMONIA) BY THE EMPLOYMENT OF THE WET SHEET.—Prof. Flint (*Gaillard's Medical Journal*, March, 1881), in a clinical lecture on this subject, says that the treatment is as yet novel in this country, and, being desirous of investigating it, he selected for experiment cases of pneumonic fever where the disease was in an early stage, the patients apparently robust, the pyrexia considerable or high, and no complications existing. The directions were to employ the wet sheet whenever the axillary temperature exceeded 103° Fahr. The patient was wrapped in a sheet saturated with water at a temperature of about 80° Fahr., the bed being protected by an india-rubber covering. Sprinkling with water of about the same temperature was repeated every fifteen or twenty minutes. If the patient complained of chilliness, he was covered with a light woollen blanket, which was removed when the chilly sensation had disappeared. In none of the cases was the blanket used much of the time while the patient was wrapped in the wet sheet. The patient remained in the sheet until the temperature in the mouth fell to 102° or lower, care being taken to watch the pulse and other symptoms. When the temperature was reduced, the wet sheet was removed, and resumed if the temperature again exceeded 103° Fahr.

Prof. Flint's conclusions, drawn from the four cases, full notes of which he gives, indicate that in his opinion the treatment is not

only not hurtful, but the history of these cases renders probable the inference that the disease was controlled and brought speedily to a favorable termination by the treatment.

CASE OF MOVABLE LIVER.—Dr. Chvostek (*Lancet*, vol. i., 1881, p. 429; from *Wiener Med. Blatt*) notes the case of a man with whom nothing appeared to be wrong, and who gave no history of any violence whatever. When he stood up, however, the upper and posterior border of the liver was felt to come forward from under the margin of the thorax, and to be six centimetres and a half below the tip of the xiphoid cartilage in the right præsternal line. The left end of the liver was plainly felt through the abdominal wall, and from it the anterior or, rather, the lower edge of the liver could be traced arching down to the right, being in the middle line fifteen centimetres below the xiphoid process, and in the right nipple and axillary lines respectively seven and one-half to two centimetres below the edge of the thorax. The liver did not markedly descend on taking a deep inspiration. In the horizontal posture it could be replaced under the ribs to a considerable extent. In lying on one side the organ fell, to some extent, towards the dependent side. The lower edge of the suspensory ligament could be felt tightly stretched, but this produced no pain; and so completely absent were all symptoms that the condition was only discovered accidentally.

QUININE AMAUROSIS.—Dr. E. Gruening (*Archives of Ophthalmology*, March, 1881) collects the rather scanty literature of the subject, and adds a case of his own fully noted and with illustrative diagrams. He concludes as follows:

After reviewing the unequivocal cases of quinine-poisoning with amaurosis (Roosa, Wecker, Voorhies, Gruening), we find a remarkable congruence in their essential features. The patient, after the ingestion of a single dose or of repeated doses of quinine in varying quantities, suddenly becomes totally blind and deaf. While the deafness disappears within twenty-four hours, the blindness remains permanent as regards peripheric vision, central vision gradually returning to the normal after some days, weeks, or months. The ophthalmoscope reveals an ischæmia of the retinal arteries and veins, without any inflammatory changes.

In view of the constancy of these symptoms and the uniformity of the ophthalmoscopic picture, we are entitled to demand for this distinct type of amaurosis a recognized position in the pathology of the optic nerve and the retina.

VARICES IN PREGNANCY.—Mr. John Lucas, writing to the *Medical Times and Gazette* (vol. i., 1881, p. 358), says that not only has he seen the varicosity in the most usual part, the leg, but also in the hypogastrium, vulva generally, and labia majora and minora and clitoris in particular, and notably in one case which caused some anxiety. During the eighth month of utero-gestation accompanying anasarca there was frequent retention of urine; the cause of the latter, as suspected by Dr. Matthews Duncan (under whose care the patient came), was, Dr. Lucas thinks, varicosity and consequent anæsthesia of the bladder. Mr. Lucas suggests as possible the theory that albuminuria may be due to this cause, and even grave uræmic symptoms also. If so, catheterism and the retention of a gum-elastic catheter *in situ* through a diaper would be indicated, not merely for the relief of the bladder, but, moreover, for the prevention of those alarming symptoms from supervening.

SUCCESSFUL USE OF NITRITE OF AMYL IN WHOOPING-COUGH.—Dr. R. C. Bowles writes to the *Virginia Medical Monthly* (March, 1881) giving a brief account of a very severe case in a female infant of four months, in which the paroxysmal stage was unusually severe, threatening death by asphyxia at each attack. The lower jaw was clinched as in tetanus, there were violent but ineffectual efforts at respiration, the face black and turgid, the brain flooded with carbonized blood, the sphincters relaxed, involuntary discharges, and the child to all appearances lifeless. But a prompt resort to the usual means of artificial respiration revived it, when it continued tolerably well until the next paroxysm, to follow the same course. This continued for several days, and, having exhausted the list of antispasmodics without relief, Dr. Bowles commenced the use of the inhalation of the nitrite of amyl, with perfect relief of all the symptoms. By the eighth day of using the nitrite, with good doses of cinchona alkaloid, the child was convalescent. Without the nitrite, he is satisfied, it would have died.

MISCELLANY.

THE CARTWRIGHT PRIZE AWARDED TO A PHILADELPHIAN.—The Cartwright prize of five hundred dollars has been awarded by the New York College of Physicians and Surgeons to Dr. Frederick P. Henry, of this city, for his essay entitled "Observations with the Hæmacytometer upon the Globular Composition of the Blood and Milk."

NOTES AND QUERIES.

GRAND FALLS, VICTORIA COUNTY, NEW BRUNSWICK, May 3, 1881.

EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR,—Knowing the interest you take in medical reform, I write to inform you that at the last session of our Legislature an act was passed entitled the "New Brunswick Medical Act," which, although susceptible of many improvements, is a great step in advance of our former law, or, rather, want of law. Among the important clauses is one requiring all who, after this, begin the study of medicine to practise in New Brunswick to pursue a four years' course, one of which may be under the direction of a duly registered

medical practitioner, but there must be a college course of three years. This will shut off from our students all but three or four of the American colleges, and will be a drop in the bucket of opinion which will finally drive the rest to adopt a better curriculum. All qualified men are required to register, and matters medical are controlled by a council of nine registered physicians (holding office for a term of years), four appointed by the Governor in Council and five by the New Brunswick Medical Society. The penalty for practising if not registered is twenty dollars for each day. Further idea cannot be given in the scope of a letter.

Yours, etc.,

G. HAYWARD COBURN.

THE WEST PHILADELPHIA MEDICAL SOCIETY.

THE want of a representative medical body which has long been felt by the physicians of West Philadelphia has been met by the organization of this new Society. On Monday evening, April 25, 1881, there was a meeting of a large number of medical men at the Institute, Fortieth and Ludlow Streets, at which an appropriate constitution was adopted, elections held, and all necessary plans matured to put the Society at once into working order. The membership includes a very large proportion of the profession in West Philadelphia and vicinity. The stated meetings are to be held on the first Monday evening of each month. The following are the officers for the first year: President, Dr. Samuel S. Stryker; Vice-President, Dr. Charles A. McCall; Secretary, Dr. James Hendrie Lloyd; Treasurer, Dr. W. H. Wallace; Censors, Drs. Skillern, Girvin, and M. B. Musser; Executive Committee, Drs. J. H. Musser, Dixon, and Dulles.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MAY 1 TO MAY 14, 1881.

SURGEONS R. H. ALEXANDER and C. T. ALEXANDER and ASSISTANT-SURGEON R. H. WHITE are detailed as members of a Board, to meet at West Point, N.Y., June 1 proximo, to examine into physical qualifications of members of the graduating class and the candidates for admission to the Academy. S. O. 109, A. G. O., May 12, 1881.

KING, WILLIAM S., COLONEL AND SURGEON.—His extension of leave of absence on account of sickness, granted him November 9, 1881, from A. G. O., still further extended six months on account of sickness. S. O. 105, A. G. O., May 7, 1881.

MCPARLIN, T. A.—His promotion to Assistant Medical Purveyor, with the rank of Lieutenant-Colonel, *vice* Cooper, deceased, confirmed by the Senate, May 10, 1881.

BACHE, D., MAJOR AND SURGEON.—Relieved from duty in Department of California, to proceed to Philadelphia, Pa., and report by letter, on arrival, to the Surgeon-General. S. O. 104, c. s., A. G. O.

MCCLELLAN, ELY, MAJOR AND SURGEON.—To report to the Medical Director of the Department for duty until further orders. S. O. 56, Department of the Columbia, April 26, 1881.

HARTSUFF, A., MAJOR AND SURGEON.—Relieved from duty in Department of the East, to take effect June 1, 1881, then to report in person to Commanding General, Department of the Missouri, for assignment to duty. S. O. 104, A. G. O., May 6, 1881.

MIDDLETON, J. V. D., MAJOR AND SURGEON.—Relieved from duty in Department of the East, to take effect June 1, 1881, then to report in person to Commanding General, Department of the Missouri, for assignment to duty. S. O. 104, c. s., A. G. O.

BROWN, J. M.—His promotion to Surgeon, with the rank of Major, *vice* McParlin, promoted, confirmed by the Senate, May 10, 1881.

BROWN, J. M., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Fort Garland, Col., and assigned to duty at Fort Lewis, Col. S. O. 86, Department of the Missouri, May 3, 1881.

HUBBARD, VAN BUREN, CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of California, to proceed to New York City, and, on arrival, report by letter to the Surgeon-General. S. O. 104, c. s., A. G. O.

GARDNER, W. H., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of the South, to proceed to Washington, D.C., and report in person to the Surgeon-General. S. O. 104, c. s., A. G. O.

CALDWELL, D. G., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Fort Fred. Steele, Wyo., and assigned to duty at Fort Sanders, Wyo., as Post-Surgeon, relieving Assistant-Surgeon Kimball. S. O. 36, c. s., Department of the Platte.

KOERPER, E. A., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of the Platte, to proceed to Philadelphia, Pa., and, on arrival, report by letter to the Surgeon-General. S. O. 104, c. s., A. G. O.

LIPPINCOTT, HENRY, CAPTAIN AND ASSISTANT-SURGEON.—Having reported at these Headquarters, is assigned to duty as Post-Surgeon at Fort Niobrara, Neb. S. O. 36, Department of the Platte, April 29, 1881.

KING, W. H., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of Dakota, and, on expiration of his present sick-leave of absence, to report by letter to the Surgeon-General. S. O. 104, c. s., A. G. O.

KIMBALL, J. P., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Fort Sidney, Neb., as Post-Surgeon, relieving Assistant-Surgeon Moseley. S. O. 36, c. s., Department of the Platte.

DE WITT, C., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of the Platte, to proceed to Philadelphia, Pa., and, on arrival, report by letter to the Surgeon-General. S. O. 104, c. s., A. G. O.

HAVARD, V., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Presidio del Norte, to proceed to Fort Concho, Texas, await there the arrival of Capt. Livermore, Corps of Engineers, and report to him by letter. S. O. 63, Department of Texas, April 28, 1881.

MOSELEY, E. B., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Fort Fetterman, Wyo. T. S. O. 36, c. s., Department of the Platte.

MAUS, L. M., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of Dakota, to proceed to Washington, D.C., and report in person to the Surgeon-General. S. O. 104, c. s., A. G. O.

REED, W., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Fort Henry, Md., and to report to the Commanding Officer, U. S. Barracks, D.C., for duty at that post. S. O. 76, Department of the East, April 29, 1881.

SHANNON, W. C., CAPTAIN AND ASSISTANT-SURGEON (now awaiting orders in New York City).—To report in person to Commanding General, Department of the Platte, for assignment to duty. S. O. 104, c. s., A. G. O.

SHUFELDT, R. W., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty in Department of the Platte, to proceed to Washington, D.C., and report in person to the Surgeon-General. S. O. 104, c. s., A. G. O.

CUNINGHAM, T. A., FIRST-LIEUTENANT AND ASSISTANT-SURGEON (now awaiting orders at Danville, Va.).—To report to Commanding General, Department of the South, for assignment to duty. S. O. 104, c. s., A. G. O.

PERLEY, H. O., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty in Department of Dakota, to proceed to Detroit, Mich., and report, on arrival, by letter to the Surgeon-General. S. O. 104, c. s., A. G. O.

BURTON, H. G., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Fort Niagara, N.Y., and assigned to temporary duty at Fort Wadsworth, New York Harbor. S. O. 78, c. s., Department of the East.

COCHRAN, J. J., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Fort Lewis, Col., and assigned to duty at Fort Garland, Col. S. O. 86, c. s., Department of the Missouri.

BUSHNELL, G. E., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—To proceed to Fort Yates, D.T., and report to the Commanding Officer of that post for duty.—S. O. 81, Department of Dakota, May 6, 1881.

BIRMINGHAM, H. P., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—To proceed to Fort Riley, Kansas, and report to Major E. B. Beaumont, Fourth Cavalry, for duty with troops about to take the field in Colorado. S. O. 90, Department of the Missouri, May 7, 1881.